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ORAL PRESENTATIONS

S01 OSTEOPOROSIS (PART I)

S01.3 INSUFFICIENCY OF VITAMIN D AND FUNCTION AMONG ELDERLY DANES WITH FALLS. A. BONNERUP VIND, H.E. ANDERSEN, P. SCHWARZ *(Research Centre for Ageing and Osteoporosis, Glostrup, Denmark)*

Objectives: Deficiency and insufficiency of Vitamin D has been associated with falls and impairment of neuromuscular function. We present data on the prevalence and correlates of insufficiency of Vitamin D among elderly Danes with falls. Methods: Among eligible participants in a study on multifactorial fall prevention serum 25 hydroxy-vitamin D (s-25OHD), PTH and ionised calcium was measured and physical function was assessed: Lower body muscle strength by "Sit to stand in 30 seconds", balance by the Dynamic Gait Index, and postural sway was measured using a sway-meter that measures displacements of the body at waist level. Insufficiency was defined as s-25OHD <50 nmol/l. Results: Among 127 women, mean age 74 years with mean s-25-OHD of 64 (30) nmol/l, 37% were insufficient. Among 45 men, mean age 75 years, mean s-25OHD was 57 (22) nmol/l, 40% were insufficient. Only 2% of women and 4% of men were deficient (s-25OHD<25 nmol/l). When comparing those with insufficiency with sufficient subjects there was no difference regarding fall history, fracture at latest fall, being homebound, lower body muscle strength, balance or sway. PTH was higher and ionised calcium lower among insufficient subjects than sufficient subjects (p<0.001). Conclusions: In Conclusion: insufficiency of Vitamin D is not more common among elderly Danes with at least one accidental fall than in the general elderly population. We do not find impaired neuromuscular function with lower levels of Vitamin D, possibly reflecting that we have few participants with very low levels of Vitamin D.

S01.4 VITAMIN D LEVEL AND FUNCTIONAL AND BALANCE MEASURES AS A FALL RISK CHARACTERISCTICS OF THE OLDER PEOPLE. A. SKALSKA[1], A. SALAKOWSKI[1], M. DUBIEL[1], D. FEDAK[2], T. GRODZICKI[1] *(1. Jagiellonian University Medical College, Department of Internal Medicine and Gerontology, Kraków, Poland; 2. Jagiellonian University Medical College, Department of Clinical Biochemistry, Kraków, Poland)*

The aim of the study was to evaluate the differences in health, functional and balance status in elderly fallers and non-fallers. Methods: An information concerning medical history, used medication and falls were obtained. Also physical examination, blood pressure measurement, and laboratory test including 25(OH)D were performed. Mood was assessed by Geriatric Depression Scale (GDS), functional status by ADL and IADL scales and balance by one leg stance, tandem stance tests and using the balance platform. Results: Among 79 patients mean age 79.05±7.59 years, 50 women, 44 (55.7%) had fallen. Falls occurred more often in women (63.6% vs 36.4%, p=0.08). Fallers were older (80.9±6.7 vs 76.7±8.1 y., p=0.01), had greater mean number of diseases (4.5±1.3 vs 3.4±1.5, p=0.0004), lower systolic blood pressure (SBP) (132.4±24.5 vs 145.1±25.4 mm Hg, p=0.03), lower hemoglobin (12.6±1.6 vs 13.6±0.9 g/dl, p=0.002), and albumin level (38.6±4.5 vs 41.8±3.1, p=0.0008). Fallers had also lower 25(OH)D level and worse functional and balance measures (Table). *p<0.05, **p<0.01; EO – eyes open, EC – eyes closed. Conclusions: Simple clinical feature like comorbidities, poor functional status, depression, lower SBP, lower albumin and hemoglobin level may predispose to falls. Low 25(OH)D status may be a risk for falling. One leg stance and tandem stance are useful tests for selection patients at risk.

S01.5 IS THERE A RELATIONSHIP BETWEEN SERUM 25OHD CONCENTRATION AND WALKING SPEED AMONG OLDER WOMEN? RESULTS FROM BASELINE ASSESSMENT OF EPIDOS STUDY. C. ANNWEILER[1], A.-M. SCHOTT[2], B. FANTINO[3], G. BERRUT[4], F. HERRMANN[5], O. BEAUCHET[1] *(1. Department of Geriatrics, Angers University Hospital, France; 2. Department of Medical Information, Lyon University Hospital, France; 3. Medical Health Center, CANMTS, Lyon, France; 4. Department of Geriatrics, Nantes University Hospital, France; 5. Department of Rehabilitation and Geriatrics, Geneva University Hospitals, Switzerland)*

Aims: Hypovitaminosis D has been associated with a low muscular strength in human and motor coordination disorders in animal. As walking involves these two elements, we hypothesized that there could be an association between the serum vitamin D concentration (25OHD) and walking speed. The objective of our study was to establish whether a low serum 25OHD concentration was associated with a low walking speed among a cohort of community-dwelling older women. Methods: 752 ambulatory women aged 75 years and older were sampled from electoral lists in five French cities. Usual and fast walking speeds calculated on a 6-meter walkway (m/s) and serum 25OHD concentration (ng/ml) were assessed. Three cut-off points of 25OHD concentration were defined (deficiency < 10 ng/ml, insufficiency ranged between 10 to 30 ng/ml and normal status > 30 ng/ml). Parathyroid hormone concentration, maximal isometric voluntary contraction of quadriceps, age, body mass index, number of chronic diseases, cognitive decline, use of psychoactive drugs and physical activity were used as confounders. Results: Linear regression showed a significant positive association between serum 25OHD concentration and usual and fast walking speeds (P=0.014 and P=0.028). Walking speed decreased significantly from normal serum 25OHD level to the lowest level for both walking speeds (P=0.002). The lowest walking speed was observed among subjects with the lowest 25OHD level (P<0.001 compared with normal level). Multiple logistic regression showed that 25OHD deficiency was significantly associated with a low usual walking speed (OR=3.2, P=0.021), whilst both deficiency and insufficiency were associated with a low fast walking speed (OR=4.6, P=0.007; OR=7.2, P=0.001), even after adjustment for confounders. Conclusions: The results show a positive association between serum 25OHD concentration and walking speed. This association was observed for usual and fast walking speed, even after adjustment for confounders. This finding is coherent with the theory of the non osseous effects of the vitamin D.

S02 HEALTH TRENDS IN OLDER POPULATIONS

S02.3 RISK FACTORS FOR MORTALITY, COMORBIDITY AND DISABILITY, AGE 60-90. S. ENGELS, M. SCHROLL *(Copenhagen University, Research Centre for prevention and Health, Denmark)*

Objectives: To identify factors of importance for successful ageing Population: The 1914 population in Glostrup, Denmark, followed from the age of 60 to the age of 90 Outcome is measured as mortality, comorbidity and disability Risk factors associated with mortality were: male gender, smoking, sedentary life style, whereas high cholesterol, blood pressure, high or low BMI and pulmonary function only showed significant associations in some decades. Risk factors for comorbidity were female gender, smoking, sedentary life style and disability. Risk factors for disability were comorbidity, female gender, marital status, education, sedentary life style. Conclusions: Strategies to change usual to successful ageing would be in younger age groups to modify education, cohabitation and life style and in old age diagnose and treat diseases, train muscle strength, increase caloric intake and assign the necessary hel

S02.4 1985-2005 PROGRESSIONS OF THE MEAN LIFE EXPECTANCY IN ROMANIA WITHIN THE DEMOGRAPHIC AGING CONTEXT. C. POPESCU[1], G. ONOSE[2], A. BOJAN[1] *(1. Ana Aslan' National Institute of Gerontology And Geriatrics Social Gerontology, Bucharest, Romania; 2. Bagdasar Arseni' Emergency Hospital Physical Rehabilitation Clinical Department, Bucharest, Romania)*

Recent demographic evolution has changed the trends of the two fundamental variables - natality and mortality - with a new slope noted. It was thus made possible for a new age structure pattern, very different from the previous one, to appear. According to the 1956 census, the proportion of elderly sixty years of age and over, was 9.9 %. Until 1956 the aging rate was accelerated. Up-to-date data show in 2000 an elderly population of 19.2%. As calculated by use of projections, in 2050 old people would represent 40% of the population. Comparatively, the study of the decrease in mortality and its role in the aging process reveals more complex and even contradictory aspects. The later statement is relevant as evidenced by our statistical analysis of inter-relationships between the mortality progression and the life-expectancy at birth. We thus attempted to clarify mortality progression mechanisms, their characteristics and consequences for Romania. At present, it is widely accepted that the demographic aging is irreversible, with multiple biological, psychological, medical, social, economic and cultural consequences. Advancing of age is associated, in principal, with risk of multiple pathology, due to degenerescent processes and have determined in the developed countries allocating funds for the elderly that count as the greatest part of the resources foreordained to healthcare. In this sense, recent studies have showed that in countries where life expectancy at birth is high, and further increases,

this presumes association of an increased number of years with risky health conditions and very high costs.

S03 THE METABOLIC SYNDROME IN THE AGEING POPULATION

S03.3 IMPACT OF BMI AT OLD AGE ON CAUSE-SPECIFIC MORTALITY. M. VAN ZUTPHEN[1,2], W. BEMELMANS[1], L. DE GROOT[2] *(1. RIVM, Centre for Prevention and Health Services Research, Bilthoven, The Netherlands; 2. Wageningen University, Division of Human Nutrition, Wageningen, The Netherlands)*

Objectives: Overweight among the elderly may not increase all-cause mortality risk or may increase this risk only modestly. This might be explained by competing mortality risks at old age. We investigated the association between BMI and cause-specific mortality to provide further insight. Methods: BMI was examined in 1988/1989 in 1980 elderly, aged 70-75 years, from 12 European cities. Ten-year mortality was assessed in 1999. The association between BMI and cause-specific mortality has been analyzed by using a Cox proportional hazards model, accounting for sex, smoking status, education level and age at baseline. When BMI was used as a continuous variable both BMI and BMI2 were included. Preliminary Results: During follow-up, 756 participants died: 300 from cardiovascular diseases (CVD), 173 from cancer, 41 from respiratory diseases, and 64 from other causes; for 178 participants, the cause of death was unknown. Obesity (BMI≥30 kg/m2) significantly increased CVD mortality (HR 1,39; 95%CI 1.00, 1.92), but not all cause mortality (HR 1,05; 0.95, 1.29). Mortality due to respiratory causes seemed to be lower among the obese (HR 0,51; 0.18-1.42). When analyzed continuously, the lowest CVD mortality risk was found at BMI 25.6 kg/m2, and this risk was significantly increased above BMI 31 kg/m2. Respiratory mortality risk seemed to decrease with increasing BMI, although this trend was not significant. Conclusions: Among elderly aged 70-75 years, BMI is still associated with mortality. CVD mortality risk was increased among the obese, while CVD mortality risk was lowest around a BMI of 25 kg/m2.

S03.4 APOE, ACE AND MTHFR GENOTYPES AND LONGEVITY IN THE BELFAST ELDERLY LONGITUDINAL FREE-LIVING AGING STUDY (BELFAST). I. MAEVE REA[1], M. HENRY[1], I.S. YOUNG[1], A.E. EVANS[1], F. KEE[1], C.F. AMBIEN[2], A.S. WHITEHEAD[3] *(1. Department of Geriatric Medicine, Queens University Belfast, UK; 2. INSERM, Paris, France; 3. University of Pennsylvania, USA)*

Introduction: The ApoE, ACE and MTHFR genes, each have genotypes [respectively ApoE4, ACE(D) and MTHFR(Thermolabile variant T], which separately, are associated with enhanced cardiovascular risk in younger groups. We hypothesized that there might be attrition of the single or summative effects of carriage of these genotypes in octo/nonagenarians in the Belfast Elderly Longitudinal Free-living Elderly Study (BELFAST), since these subjects seemed to had survived premature cardiovascular events. Methods: ApoE, ACE and MTHFR genotypes were identified from DNA, by standard methods in octo/nonagenarian subjects from the BELFAST study. Results: The frequency of the ApoE4 genotype decreased significantly in >90s (P=0.0008) and ApoE2 increased (p=0.05) compared to MONICA subjects but neither the ACE DD(p=0.68) nor MTFHR TT(p=0.13) frequencies changed compared to younger controls. Logistic Regression compared the importance of carriage of ApoE4, ApoE2, ACE(D) and MTFHR(T) genotypes between BELFAST octogenarians and nonagenarians and suggested a negative effect for carriage of ApoE4 in nonagenarians. Sex had no apparent effect. Conclusions: Of the 3 genes tested, ApoE4 seems to be the most important negative risk factor for longevity with ApoE 2 having some protective effect and ACE and MTFHR having neutral influences in very old age.

S05 OSTEOPOROSIS (PART II)

S05.3 PROSPECTS OF PEPTIDE BIOREGULATORS APPLICATION IN THE TREATMENT OF OSTEOPOROSIS IN AGEING. G. RYZHAK, V. KHAVINSON, L. KOZLOV, V. POVOROZNYUK *(St. Petersburg Institute of Bioregulation and Gerontology, Russian Federation)*

In developed countries osteoporosis in old and very old persons is one of key problems of healthcare. Hence, discovery of efficient means of treatment for system osteoporosis is important for gerontology. Effect of peptide bioregulators on structural and functional status of osseous tissue in experimental rat model of osteoporosis was studied. The experiment involved 100 mature female Wistar rats aged 4-6 months with body weight 200-230 g, randomly subdivided into 8 groups of 10 animals, which were intramuscularly injected with experimental medications in different doses, and 2 control groups of 10 animals – ovarioectomized rats receiving no medications, and unoperated animals receiving saline solution. Peptide bioregulators were represented by calf cartilages preparation in the dose of 1 mg, and -31, which is Ala-Glu-Asp tripeptide, in the dose of 10 μg. Medications were administered intramuscularly, daily, for 30 days. Rats were subjected to bilateral ovariectomy to model post-menopausal osteoporosis. Results showed reliable efficiency of cartilages preparation and -31 peptide from the 30th day since ovariectomy. Cartilages preparation was the most efficient: after a month of administration mineral density of osseous tissue (MDOT) was reliably increased and retained after 2 months of experiment. After ovariectomy medications caused a reliable increase in MDOT in a month. However, in 1 month after completion of medication course (2 months after surgery) MDOT was reliably decreased, pointing out the necessity of continuous administration of medications to attain osteoprotective effect. Thus, administration of peptide bioregulators is a promising method of prevention and treatment for post-menopausal osteoporosis.

S05.4 MULTIDISCIPLINARY PREVENTION OF FALLS. A RANDOMIZED, CONTROLLED TRIAL. S.-L. KIVELA (*University of Turku, Department of Family Medicine, Finland)*

Objectives: The objectives are to describe the prevention program, adherence and effects of the program on risk factors and incidence of falls. Material and Methods: Community-dwelling persons aged 65 yrs.or were randomized into an intervention group (IG)(N=293)and a control group (N=298).The subjects in IG attended multidisciplinary prevention lasting for 12 months and consisting of reduction of fall risk increasing drugs, guidance of fall prevention, physical exercises in groups, lectures in groups, psychosocial activity groups and individual home exercises. Subjects in CG were informed about prevention of falls. Results: Adherence rate was 58% in physical exercise groups, 25% in psychosocial groups, 33% in lectures, and home exercises were performed on average 11 times per month. The numbers of regular users of psychotropics and benzodiazepines decreased. Positive effects were found on balance and muscle strenght in women, on depressive symptoms in men and in subjects aged 75-, and on some dimensions of quality of life in men and in women. During the intervention period, the incidence of falls was lower in IG than in CG among subjects 65-74yrs. and in subjects with stronger depressive symptoms, higher self-perceived risk of falling, stronger muscle strenght, at least three previous falls, and higher amount of drugs at baseline. Conclusions: The program was implemented with moderate adherence rates. The levels of some risk factors of falls decreased and the incidence of falls could be diminished among some subgroups during the follow-up of 12 months.

S05.5 A PATIENT EDUCATION PROGRAMME PREVENTS PATIENTS WITH OSTEOPOROSIS FROM FALLING. D. SUSANNE NIELSEN[1], W. NIELSEN[2], B. KNOLD[1], J. RYG[1], N. NISSEN[1], K. BRIXEN[1] *(1. Departments of Endocrinology, Odense University Hospital, Denmark; 2. Departments of Physiotherapy, Odense University Hospital, Denmark)*

Background: Falls are a leading cause of disability and mortality due to injury in the elderly. Hip fracture is one of the most costly and debilitating outcomes resulting from a fall. While osteoporosis is a major risk factor in hip fractures, falls are equally significant and falls prevention is therefore important. We hypothesized that a group-based, multi-disciplinary, education program would prevent falls. Participants and Design: A total of 300 patients (32 men aged 65 ± 9 yrs and 268 women aged 63 ± 8 yrs), recently diagnosed with osteoporosis and starting on specific treatment, were randomised to either the 'school' (n=150) or 'control' (n=150) group. In the school group patients attended four classes with 6-12 participants for four weeks (a total of 12 hours). Teaching was carried out by nurses, physiotherapists, dieticians, and doctors and was based on dialogue and situated learning. Teaching was designed to increase empowerment. Lessons were focusing on falls prevention. Patients registered episodes of falls on a postcard send to the clinic every month. Results: In the school group, significantly fewer patients experienced one or more falls compared with the control group (n=55 and n=76, respectively, p=0.01). Similarly, the average period without a fall was 15 month for the control group and 19 month for the school group (P<0.002). Conclusions: This multidisciplinary patient education programme lead to a decreased number of falls. The risk of falling should be and integrated part of the assessment of patients for osteoporosis.

S06 MENTAL HEALTH - COGNITIVE FUNCTION

S06.3 PARATHYROID HORMONE AND COGNITIVE DECLINE IN A GENERAL AGED POPULATION. M. BJORKMAN[1], A. SORVA[2], R. TILVIS[1] *(1. Helsinki University Central Hospital, Finland; 2. Helsinki Health Center, Finland)*

Objectives: Cognitive impairment is a known manifestation of primary hyperparthyroidism and uremia. Secondary hyperparathyroidism has been associated with cognitive decline also in elderly patients without renal failure. However, long-term data on unselected populations are lacking. In order to evaluate the association between serum parathyroid hormone (PTH) and cognitive decline random persons of three age cohorts (75, 80, and 85 years) were followed for 10 years. Methods: The baseline examinations of subjects (N=583) included an assessment of cognition with the Mini-Mental State Examination (MMSE) and Clinical Dementia Rating (CDR) in addition to serum intact PTH, ionized calcium (Ca2+), and creatinine levels. Changes in cognition were assessed at one (MMSE n=438; CDR n=471) five (CDR n=355), and ten years (MMSE n=138; CDR n=142). Results: Serum PTH levels were significantly associated with MMSE-scores and tentatively with CDR-classes. Elevated PTH levels (IV-quartile ≥ 63 ng/l) indicated a 2.39-fold (95%CIs 1.40-4.01) risk for cognitive decline (decrease in MMSE-score > 3) within the first year of follow-up. The predictive value of elevated PTH remained significant after controlling for age, sex, and baseline MMSE (RR=1.92, 95%CIs 1.10-3.34). Further controlling for Ca2+ or creatinine did not abolish this significance (RR=2.22, 95%CIs 1.25-3.96). However, the association between PTH and cognition was not observed at five- and ten-year assessments. Conclusions: Elevated serum PTH levels indicate one-year cognitive decline in a general aged population. Because of the high mortality rate of aged patients with hyperparathyroidism and cognitive decline, larger samples are needed to test the long-term predictive value of PTH.

S06.4 TREATING DEPRESSION IN A DEMENTED POPULATION IN A DANISH MEMORY CLINIC. P. NIMANN KANNEGAARD, A. JUNG, F. SIMONSEN, S. SANDERS *(Amager Hospital, Copenhagen, Denmark)*

Objectives: Symptoms of dementia and depression can be difficult to differentiate. The frequency of depression in demented patients can be underestimated. Methods: Retrospective review of medical records of 822 demented patients diagnosed in a Memory Clinic in Copenhagen, during the period from 1993-2007. At referral depression and dementia anamnesis were recorded. Patients were rated by Hamilton Depression Scale (HDS), Melancholia Scale (MES) and Mini Mental State Examination (MMSE). CT scan of the cerebrum and blood tests were done in order to exclude treatable cognitive deficiencies. Depressive patients were treated with citalopram/escitalopram or mirtazapin. After 3 months HDS, MES and MMSE were repeted to assess effect. If non-sufficient, treatment was supplemented with another antidepressant rather than increasing the dose of the initial preparation. Depressive patients suffering from Alzheimer's dementia were not treated with acetylcholinesterase inhibitors until effect of antidepressants had been shown. Results: 57.9 % of all the patients and 60.0% of the Alzheimer patients were depressed at referral. 75.6% of the patients with Alzheimers- or mixed dementia benefited from antidepressant treatment. Discussion: We found a large number of demented patients to be depressed. In the case of Alzheimer patients it could be caused by the changes in cerebral tissue and neurotransmitters as part of a dementia illness. The 76 % effect of the antidepressive treatment in this group compared with the 50 % in the group of patients with another form of dementia supports this theory. Antidepressants seems to be an essential supplement to the acetylcholinesterase inhibitors.

S06.5 PSYCHOTROPICS, OPIOIDS, ANTICHOLINERGICS AND ANTIEPILECTICS AS PREDICTORS OF COGNITIVE DECLINE IN THE COGNITIVELY DISABLED AGED. J. PUUSTINEN[1,2,3], J. NURMINEN[1,2], M. LOPPONEN[1,2], T. VAHLBERG[4], R. ISOAHO[1], S-L KIVELA[1,5] *(1. University of Turku, Department of Family Medicine, Turku, Finland; 2. Härkätie Health Center, Lieto, Finland; 3. Satakunta Central Hospital, Unit of Neurology, Pori, Finland; 4. University of Turku, Department of Biostatistics, Turku, Finland; 5. Hospital Districts of Varsinais-Suomi and Satakunta, Finland)*

Aims: To analyze the relationships between the use of benzodiazepine or related drugs (BZD/RD), antipsychotics or antidepressants or their concomitant usages either with each other or with opioids, anticholinergics or antiepileptics and the risk of cognitive decline in the aged (65+) with cognitive disabilities. Material and Methods: The material was based on the longitudinal population study carried out in two phases (1990-1991, 1997-1998) in Lieto, Finland. The number of surviving attendees was 617. Cognitive abilities were followed by Mini Mental State Examination (MMSE). The data about the use of medications was based on interviews and medical records. Analyses were performed among the cognitive disabled (MMSE 0-23) at baseline (N=52). Age was used as covariate in multivariate analyses. Results: The mean age at baseline was 75.9 ± 7.2 years. The use of a BZD/RD or any psychotropic was associated with greater cognitive decline in those aged 75 and over. The higher decline in MMSE sum points was associated with the concomitant use of BZD/RD and antipsychotic; or antidepressant in those aged 65 and over; or any medication with CNS effects in those aged 65+, 75+ and among women aged 65+. Conclusions: The use of BZD/RD or any psychotropic medication may be independent risk factors for cognitive decline in the cognitively disabled. The concomitant use of BZD/RD and antipsychotic, antidepressant or other CNS affecting medication are associated with higher risk of cognitive decline. The use of two or more CNS affecting medications should be based on critical assessments.

S07 THE METABOLIC SYNDROM: COMPOMENTS (PART I)

S07.3 HDL CHOLESTEROL MIGHT BE MORE IMPORTANT ROLE THAN GLUCOSE CONTROL IN THE PREVENTION OF ATHEROSCLEROTIC DISEASES IN JAPANESE DIABETIC ELDERLY. T. HAYASHI[1], K. INA[1], H. NOMURA[1], A. IGUCHI[2] *(1. Nagoya University Graduate School of Mediicine, Japan; 2. Aichi Shukutoku University, Japan)*

Background: Ischemic heart and cerebrovascular disease (IHD, CVD) are important complications in diabetes. Hyperglycemia, dyslipidemia, hypertension and aging increased their risks. However the most important factor for their prevention in diabetic elderly is not known. Methods: A single-center with 40 Japanese institutions, prospective cohort study(Japan-CDM). Adult ADL independent type II diabetic patients, without a history of IHD or CVD were eligible. Primary endpoints were IHD and CVD. Patients are treated according to the guidelines of Japan Atherosclerosis Society(LDL less than 120mg/dl) and followed up for 2 years. Results: 4,014 diabetic patients, male/female ratio,1.105; age, 67.4□9.5y.o. Dyslipidemia and hypertension were 75.9% (medicated, 50.9%, statin,45%) and 70.5%. Glycated hemoglobin, triglyceride, LDL-C, HDL-C and blood pressure were 7.53+1.12%, 140.6+108.3, 120.1+14.2, and 55.8+18.0 mg/dL. IHD and CVD occurred in 1.52 and 1.3% during 2 year. Elevated HDL-C was linearly related to lower IHD and CVD. In lower LDL-C, total death was increased. In old old, plasma HDL correlates the number of IHD, but not hyperglycemia , or blood pressure levels (P<0.05,). However, in younger than 65y.o., glycated hemoglobin, but not plasma LDL correlates the number of IHD. The pursuit rate was 95%. Conclusion: 2 years follow-up showed: 1.Plasma HDL concentration inversely correlated with the incidence of IHD and CVD. 2. LDL and HDL levels were also related to the ratio of IHD or CVD, however Glycated hemoglobin did not related in old and old. Strict lipid control may prevent vascular events in Japanese diabetic old and old.

S07.4 NEITHER ACE GENE POLYMORPHISM NOR CHOLESTEROL PREDICTS MORTALITY OUTCOMES IN OCTOGENARIAN AND NONAGENARIAN SUBJECTS IN THE BELFAST ELDERLY LONGITUDINAL FREE-LIVING AGING STUDY (BEFLAST). I. MAEVE REA, M. HENRY, A.E. EVANS, L. TIRET, O. POIRIE, F. CAMBIEN *(Department of Geriatric Medicine, Queens University Belfast, UK)*

The homozygous DD polymorphism of the angiotensin converting enzyme (ACE) gene has been associated with increased risk of myocardial infarction, ventricular hypertrophy and death compared with ID heterozygotes and DD homozgotes in some though not all European studies. In addition, elevated cholesterol is associated with cardiovascular risk. In Northern Ireland, which has a high incidence of heart disease, we measured cholesterol and the frequency of the ACE gene polymorphism, in octo/nonagenarians who seem to have been protected from premature vascular disease and early mortality. 327 community-living elderly people >80 years of age (mean age 89 years), apparently well and mentally alert, were enlisted. The frequency of II, ID and DD genotypes was not different between the sexes, nor for >90s compared to >80 year olds nor in comparison with younger WHO Belfast MoniCa subjects. Systolic Blood Pressure showed a non significant rise through II (134mm), ID (136mm) and DD(137mm) genotype (p=0.75) with no change for diastolic blood pressure (p=0.15). ACE genotype did not affect cholesterol, HDL, LDL, triglycerides or glucose but lower fibrinogen tended to be associated with the D allele (p=0.06). Kaplan Meier curves derived for life expectancy for ACE genotypes and categories of cholesterol above and below 5.3 and 5.8umoles of cholesterol, showed no significant differences in BELFAST octo/nonagenarians In Northern Ireland where there is a high incidence of heart disease, neither DD ACE gene polymorphism frequency nor cholesterol levels appear to affect life expectancy in BELFAST octo/nonagenarian survivors. These findings are in contrast to the French study where DD genotype associated with premature death in younger groups, was increased in centenarians, but are in keeping with the stochastic theory of ageing.

S09 CANCER

S09.3 WHAT PREFERENCES EXPRESS ELDERLY HOSPITALIZED PATIENTS WITH AN ADVANCED ONCOLOGICAL DISEASE IN THEIR ADVANCE DIRECTIVES? S. PAUTEX[1], G. NOTARIDIS[2], L. DERAME[2], G. ZULIAN[1] *(1. CESCO, Service of Palliative Medicine, Geneva, Switzerland; 2. CESCO, Department of Rehabilitation and Geriatrics, Geneva, Switzerland)*

Introduction: Elderly patients in advanced stages of a life-limiting illness and their caregivers in general have often high levels of information needs. They experience fear of pain, indignity, abandonment and the unknown. Completion of advance directives (ADs) can ease many fears as well as improve communication. Objective: The aim of our study was to better identify preferences and values expressed in ADs of 50 hospitalized elderly patients with an advanced oncological disease. Methods: Retrospective chart review. Results: Main medical concerns of the patients were resuscitation and introduction of artificial nutrition. Very few patients had unrealistic expectation. Patient's symptom management preferences were quite different from one to another. Content of ADs not only involves life-threatening technology, but also psycho-social and religious beliefs and values. All patients designated at least one surrogate. Conclusion: ADs should not be considered only as another questionnaire to be completed, but also as a process that allows to improve communication.

S11 THE METABOLIC SYNDROME: COMPONENTS (PART II)

S11.3 WHITE COAT HYPERTENSION IS HIGHLY PREVALENT IN FRAIL ELDERLY ADMITTED IN NURSING HOME. RESULTS OF A STUDY CONDUCTED WITH AMBULATORY BLOOD PRESSURE MONITORING. A. UNGAR, A. FEDELI, S. ZANIERI, S. PECCHIONI, M. BELLADONNA, L. LAMBERTUCCI, E. LOTTI, G. PEPE, A. BAMBI, A. MORRIONE, G. MASOTTI, M. MARCHIONNI *(Azienda Ospedaliero-Universitaria Careggi. University of Florence, Italy)*

Aims: to verify the prevalence of hypertension in patients living in nursing homes and to evaluate the relation between clinical blood pressure and ambulatory blood pressure monitoring (ABPM). Methods: we enrolled 273 patients (mean age 81 years) divided in 3 groups: Group A: hypertensive outpatients (N=100); Group B: frail elderly admitted in nursing home (N=100) Group C: patients admitted to the rehabilitation ward of the same centre (N=73). Clinical and pharmacological data were collected for all patients as well as clinical blood pressure (OBP) and 24 hour ABPM. Results: Patients of group A had the higher prevalence of clinical hypertension (Group A 71%, Group B 51%; Group C 70%). We found a good correlation between blood pressure values measured clinically an with ABPM only in Group A (PAS: r=0,54; p=< 0,001; PAD r=0,70, p=<0,001), while the correlation was poor in Group B (PAS: r=0,3 and p=0,02; PAD: r=0,11 and p=0,2). In Group C the correlation was intermediate (PAS: r=0,62; p=<0,001;PAD0,44; r<0,001). The prevalence of white coat hypertension was 14% in Group A, 57% in Group C and of 70% in Group B. Circadian rhythm analysis was preserved only in 22% both in Groups B and C. In Group A we found a higher percentage of patients with preserved circadian rhythm (33%). Conclusions: This study demonstrated a poor correlation between clinical and ambulatory blood pressure, with an high prevalence of white coat hypertension. The hypertensive patient in nursing home is very peculiar and deserves a careful management.

S11.4 THE OBESITY AND DIABETES TRANSITION IN THE ELDERLY: THE ITALIAN EXPERIENCE IN CAMPANIA FROM 1992 TO 2003. F. CACCIATORE[1], F. MAZZELLA[1], C. NAPOLI[2], D.F. VITALE[1], L. VIATI[1], G. LONGOBARDI[1], G. LUCCHETTI[3], P. ABETE[3], F. RENGO[3] *(1. Salvatore Maugeri Foundation, Department of Cardiovascular Rehabilitation, Telese Terme, Italy; 2. Department of General Patology, Division of Clinical Pathology and Exellence research center on cardiovascular disease, II university of Naples, Italy; 3. Chair of Geriatrics, University 'Federico II' Naples, Italy)*

Objectives: The aim of this study was to evaluate trends in BMI, the prevalence of obesity (BMI ≥ 30) and diabetes between 1992 and 2003 among the elderly population of Campania Region in Southern Italy. Methods: Data came from two Epidemiological survey performed in 1992 (Osservatorio Geriatrico Campano), a random sample of 1288 elderly subjects aged 65-95 years, selected from the electoral rolls of Campania, and in 2003 (I.PR.E.A.) Italian Project on Epidemiology of Alzheimer's disease a random sample of 4800 elderly subjects aged 65-84 years, selected from the registries of 12 Italian rural and urban municipalities. We used data derived from 286 subjects enrolled in Telese Terme a municipality of Campania. Results: From 1992 to 2003, the mean BMI increased from 25.9±4.0 to 27.6±3.8 among men and from 27.1±5.4 to 28.2±3.8 among women (each P < 0.001). Among men, the prevalence of obesity and diabetes increased from 13.3% and 11.2%, respectively, in 1992 to 23.4% and 26.7%, respectively, in 2003 (each P < 0.001). Among women, the prevalence of obesity and diabetes increased from 23.1% and 16.8%, respectively, in 1991 to 36.8% and 23.7%, respectively, in 2003 (each P < 0.001). Conclusions: Obesity and diabetes increased of 46.0% and 61.1% respectively in the elderly population of Campania during the 1990s. Preventive and treatment strategies are necessary to stop the epidemic diffusion of obesity and diabetes in this Mediterranean European area.

S14 PAIN

S14.3 IMPROVING PAIN MANAGEMENT IN DEMENTED OLDER PATIENTS: VALIDATION OF THE DOLOSHORT OBSERVATIONAL PAIN ASSESSMENT SCALE. S. PAUTEX[1], F. HERRMANN[2], P. LE LOUS[2], G. GOLD[2] *(1. CESCO, Service of Palliative Medicine, Geneva, Switzerland; 2. CESCO, Department of Rehabilitation and Geriatrics, Geneva, Switzerland)*

We demonstrated in a prior study that the Doloplus2 is a valid and reliable pain assessment tool for patients with dementia and that it may be substantially shortened from 10 to 5 items. Aim of this prospective study was to validate the short version: Doloshort. Mean age of the 115 patients was 81.8 ± 8.2. Mean MMSE of patients with dementia (n: 73) was14.3 ± 7.8. Internal consistency was adequate for all items (Cronbach alpha: 0.729). Doloshort correlated well with self assessment (Spearman's coefficient: =0.68, p<0.001). Correlation between the score of the Doloshort and the Pittsburgh Agitation Scale, or measures of anxiety, depression and appetite was low. The scale was able to discriminate among the different intensities of pain and to measure the effect of opioids. Threshold ≥1 of Doloshort had a sensitivity of 90.7% and a specificity of 54.6% for predicting pain. Doloshort is easy to use and demonstrates good concurrent, construct and discriminant validities. These results encourage us to propose a new strategy for the management of pain in elderly patients with dementia.

S14.4 PAIN AND MOBILITY LIMITATION IN COMMUNITY-DWELLING OLDER PEOPLE. K. LIHAVAINEN[1], S. SIPILA[1], T. RANTANENV, S. HARTIKAINEN[2] *(1. University of Jyväskylä, Department of Health Sciences, Finnish Centre for Interdisciplinary Gerontology, Jyväskylä, Finland; 2. University of Kuopio, Faculty of Pharmacy, Kuopio Research Centre for Geriatric Care, Kuopio, Finland)*

Objectives: The prevalence of painful chronic conditions increases with age, but relatively little is known about the effects of pain on mobility in older people. The purpose of this cross-sectional study was to investigate the association of pain in lower body with mobility limitation among community-dwelling older people. Methods: The population-based data consisted of 595 women (n=421) and men (n=174) aged 75 and older. Pain was assessed with a questionnaire, and classified into three categories: moderate to severe pain in lower body (MsP), mild pain in lower body (MildP), and no pain in lower body (NoP). Mobility limitation was assessed by Timed-up-and-go test (TUG>12s) and self-reported difficulty walking 400 meters. Results: MsP was reported by 157 participants (26%), and MildP by 96 participants (16%). Mobility limitation was observed in 94 (60%) of participants with MsP, 41 (43%) of participants with MildP, and 99 (29%) of those who reported NoP (p<0.001). After controlling for age, gender and factors on the pathway between pain and mobility including body mass, diseases, muscle strength, and exercise activity, the participants with MsP had three times (OR 3.07, CI95% 1.83-5.18) the risk of mobility limitation compared to those with NoP. The OR of mobility limitation among participants with MildP was 1.57 (CI95% 0.86-2.86) after multivariate adjustments. Conclusions: The results suggest a direct association of MsP on loss of mobility. This study underlines the importance of careful assessment and treatment of pain in promoting mobility of older people, but further studies are needed.

S14.5 ARE WE KEEPING PAIN ON THE BRAIN FOR THE ACUTELY ILL ELDERLY? S. BISWAS[1], S. WILLICOMBE[1], P MYINT[2] *(1. Ipswich Hospital, Ipswich, UK; 2. Norfolk and Norwich University Hospital, Norwich, UK)*

Background: Pain management is fundamental to good clinical care. In the UK, the Royal College of Physicians of London, the British Geriatrics Society and the British Pain Society jointly published "Assessment of Pain in Older People" in September. Methods: We performed a retrospective study in a district general hospital with catchment population of 250,000 in West Norfolk, UK. We included all patients admitted to an elderly ward during October-November 2007. We evaluated management of pain within the first 24 hours of acute hospital admission. Results: N = 140. Male = 74 (53%). Median = 84 years (range=56-99; =<70, n=8). Only 93 (66%) were asked about presence or absence of pain on admission. Of those who complained of pain (n=45), severity of pain was documented in 5 (11%) and management was documented in 17 (38%). Of 17 with documented pain management, only 4 (23%) had further assessment of effectiveness of pain management. Only 70 (50%) of the patients had their mental state assessed by the abbreviated mental test score (AMTS). Among those who complained of pain and AMTS =<8 (n=51), only 4 (8%) had objective documentation as outlined in the joint guidelines. Conclusions: Our findings suggest that pain management is sub-optimal in the elderly in the acute setting. Regular monitoring and education have potential to improve the adherence to National guidelines and clinical care.

S15 ACUTE GERIATRICS (PART I)

S15.3 SEVERITY OF DISEASE IN ELDERLY PATIENTS COMPARED TO YOUNGER AGE GROUPS, ADMITTED FOR ACUTE CARE TO A GENERAL HOSPITAL. F. RASHIDI[1], A.H. RANHOFF[2], P. MOWINCKEL[1] *(1 Ullevål University Hospital, Geriatrics Department, Oslo, Norway; 2. Kavli Research Center for Ageing and Dementia, University of Bergen, Haraldsplass Hospital Bergen, Norway)*

Objectives: Elderly people are often admitted to hospital for acute care. The benefit of admissions and the pressure on hospital beds are debated. Data about severity of disease in different age groups are lacking and can be helpful in planning of acute care for the growing elderly population. The objective was to assess the severity of illness upon admission in relation to age groups in a patient population admitted for acute care. Design: Prospective observation study. Setting: Accident and emergency department in a general community hospital, Diacon Hospital, Oslo, Norway. Participants: All consecutive admissions for acute care during the period 01.10.-31.12.06. Main outcome measures: APACHE II scores which include the Acute Physiology Score (APS) upon admission, age and in-hospital mortality. Gender, place of residence, social services, admission and discharge diagnoses and co-morbid conditions were also registered. Results: 1565 (90.1%) of totally 1736 patients admitted were enrolled. There were 918 (58.7%) women and 600 (38.3%) patients were 80+ years. The three most common disease categories were infections, acute cerebrovascular disease and cardiovascular disorders. Estimate (95% C.I.) for the age effect on APACHE II score was 0.13 (0.12, 0.14) p<0.0001 which means that an increase of one year increases the APACHEII score with 0.13 units, after adjusting for the number of co-morbidities. Age effect for APS was estimated to 0.02. Conclusions: Elderly patients admitted to a general hospital for acute care have a higher severity of disease than younger age groups. Our results have implications for resource allocations and admission policies.

S15.4 HEMOGLOBIN LEVELS PREDICT FUNCTIONAL CHANGE DURING HOSPITALIZATION IN OLDER PATIENTS. S.VOLPATO, F. SIOULIS, G. GUERRA, M. CAVALIERI, C. MARALDI, J.M. GURALNIK, R. FELLIN *(Section of Internal Medicine, Gerontology and Geriatrics, University of Ferrara, Italy)*

Background: Decline in physical function is common in older persons admitted to the hospital. Furthermore, in older people hemoglobin levels are associated with poor physical performance and disability, but scant data are available for hospitalized patients. We evaluated the cross sectional and longitudinal association between hemoglobin levels and objective measures of physical performance in older hospitalized patients. Methods: Ninety two patients aged >=65 admitted to the hospital for a medical event were enrolled. Inclusion criteria were ability to walk across a small room and absence of severe cognitive impairment (MMSE>18). Hemoglobin levels were assessed at hospital admission; anemia was defined according to WHO criteria. Lower-extremities performance was evaluated at hospital admission and at discharge using the Short Physical Performance Battery (SPPB), including standing balance, 4-meter walk, and five repetitive chair stands. Results: Mean age was 78 years; 49% were women and anemia prevalence was 47.8% (44.4% for women and 51% for men, respectively). Lower hemoglobin levels were associated with lower SPPB score at baseline (r:.24; p=0.042) and with greater decline in SPPB during hospitalization (p=0.006). This finding was still significant after adjustment for age, gender, MMSE, comorbidity and ADL disability (beta: 0.24; P =0.042). Additionally, after multiple adjustments and compared to patients with normal hemoglobin levels, patients with anemia had a four-fold risk of SPPB decline during hospitalization (O.R.: 4.0; 95% C.I.: 1.0-14.9). Conclusions: In older hospitalized patients, hemoglobin level is an independent risk factor for functional decline. The effect of anemia treatment on functional status remained to be determined.

S15.5 THE MULTIDIMENSIONAL PROGNOSTIC INDEX (MPI) PREDICTS SHORT- AND LONG-TERM MORTALITY IN OLDER PATIENTS WITH COMMUNITY-ACQUIRED PNEUMONIA. A. PILOTTO[1], F. ADDANTE[1], M. FRANCESCHI[1], G. LEANDRO[2], G. D'ONOFRIO[1], M. CORRITORE[1], V. NIRO[1], C. SCARCELLI[1], D. SERIPA[1], B. DALLAPICCOLA[3], L. FERRUCCI[4] *(1. Department of Medical Sciences, Geriatric Unit, & Gerontology and Geriatrics Research Laboratory, San Giovanni Rotondo, Italy; 2. Biostatistics & Gastroenterology Unit, IRCCS Saverio De Bellis, Castellana Grotte, Italy; 3. Department of Research, CSS Mendel Institute, Rome, Italy; 4. National Institute on Aging, Longitudinal Studies Section, Harbor Hospital Center, Baltimore, MD, USA)*

Aims: To evaluate the usefulness of a Multidimensional Prognostic Index (MPI) based on a Comprehensive Geriatric Assessment (CGA) for predict mortality risk in older patients with community-acquired pneumonia(CAP). Methods: 170 elderly patients diagnosed with CAP admitted from January 04 to December 06 to the Geriatrics Unit of the Casa Sollievo della Sofferenza Hospital, IRCCS, San Giovanni Rotondo, Italy were screened. A standardized CGA including ADL, IADL, SPMSQ, MNA, Exton-Smith scale, CIRS, drug use and social support network was used to calculate the MPI for mortality. Three grades of MPI were identified, i.e. low-risk, range=0.0-0.33; moderate-risk, range 0.34-0.66 and severe-risk, range=0.67-1-0. The Pneumonia Severity Index (PSI) was also calculated. Using the proportional hazard models we studied the predictive value of the MPI for all cause of mortality and comparison with that of PSI over a 1-year of follow-up. Results: 135 patients (M=89,F=45,mean age=78.7±8.8,range 65-100) were included:58 patients resulted in the low-risk group (MPI=0.19±0.08), 42 in the moderate-risk group(MPI=0.49±0.09) and 34 in the severe-risk group(MPI=0.76±0.07).Higher MPI values were significantly associated with higher mortality after 30-days and 1-year follow-up (p<0.001). A close agreement was found between the MPI-estimated and the observed mortality. Multivariable analysis, adjusted for age and sex, demonstrated that MPI was significantly associated with mortality at 30-days (OR=4.58, 95% CI=2.09–10.04, p<0.001) and 1-year (OR=2.82,95%CI=1.59–5.00, p<0.001) of follow-up. MPI demonstrated an area under the ROC curve higher than PSI. Conclusions: This MPI accurately stratifies hospitalized elderly patients with CAP into groups at varying risk of short- and long-term mortality.

S17 SURGERY IN OLDER PATIENTS (PART II)

S17.3 PATIENTS' PREFERENCES FOLLOWING A BAD HIP FRACTURE: A CONJOINT ANALYSIS STUDY. B. NI BHUACHALLA[1], P.E. COTTER[2], B. NI MHAILLE[1], A. EGAN[1], A. KAVANAGH[1], M. O'CONNOR[1], S.T. O'KEEFFE[1] *(1. Galway University Hospitals (University College Hospital Galway), Ireland; 2. Cork University Hospital, Ireland)*

Objectives: An Australian study of older, community dwelling women found that rather than experience loss of independence and nursing home admission after a bad hip fracture, 80% would prefer to be dead (Salkeld, BMJ 2000;320: 341-346).Using a conjoint analysis approach, our objective was to re-examine this issue. Methods: Older hospital patients with a history of falls, fracture or osteoporosis were asked to imagine they suffered a hip fracture resulting in significant residual disability. Subjects were requested to rank in order of preference, an orthogonal array of 9 out of 36 potential outcome scenarios. Each scenario reported risk of falls (3 levels), life expectancy (3 levels), discharge location (home with support or nursing home) and family opinion (agree or disagree with discharge location). Results: Of 209 patients satisfying inclusion criteria, 114 completed the study (median age 82, 57% female, 86% community dwelling). Utilities and relative importance scores for the factors studied are shown in the Table.

Factors	Levels	Utilities	Importance Scores
Length of life	1yr	1.005	39.3%
	2yrs	2.011	
	4yrs	3.016	
Discharge location	Home	1.221	29.6%
	Nursing home	-1.221	
Falls risk	1/month	0.050	16.3%
	3/year	0.099	
	1/year	1.49	
Relatives views	Agree	0.18	14.8%
	Disagree	-0.18	

Conclusions: In this study, older people at high risk of fracture judged that after a bad hip fracture, their main priorities would be to prolong their life and to remain at home.

S17.4 COMPREHENSIVE GERIATRIC ASSESSMENT CAN PREDICT RISK OF COMPLICATIONS AFTER SURGERY FOR COLORECTAL CANCER IN ELDERLY PATIENTS. S. ROSTOFT KRISTJANSSON[1], A. NESBAKKEN[2], T.B. WYLLER[1] *(1. University of Oslo, Department of Geriatric Medicine, Ullevaal University Hospital, Oslo, Norway; 2. Department of Surgery, Aker University Hospital, Oslo, Norway)*

Background: As an increasing number of cancers occur in elderly people, oncologists and surgeons need to integrate the principles of geriatrics into oncology care. A comprehensive geriatric assessment (CGA) provides an individualized approach, and could possibly predict tolerance of treatment and life-expectancy in oncogeriatric patients. Objectives: The purpose of this ongoing prospective study is to determine if categorization of patients as frail or non-frail based on the CGA can predict surgical complications for elderly patients with colorectal cancer. Data from the first 147 patients are presented. Patients and Methods: A preoperative CGA was performed in patients >69 years undergoing elective surgery for colorectal cancer. Tools included were Barthel Index, Nottingham Extended ADL Scale, ECOG Performance Status, MMSE, Mini Nutritional Assessment, Geriatric Depression Scale, and Cumulative Illness Rating Scale. Patients were classified as frail when dependency in personal ADL, severe comorbidity, dementia, depression, malnutrition or polypharmacy (>7 daily medications) was present. Surgical complications were classified as minor or severe. Results: 147 patients, 63 (41%) males, median (range) 79 (70-92) years, underwent elective resection for colorectal cancer. 54 (37%) were frail. 82 experienced complications; 40/54 (74%) of frail patients versus 42/93 (45%) of non-frail patients (p=0.001). The incidence of severe complications was 61% and 26%, respectively (p<0.0001). Age, ASA class, and Dukes' stage did not predict complications. Conclusions: Preoperative CGA can identify patients with a significantly increased risk of complications after surgery. Future studies should focus on whether geriatric interventions in frail patients can reduce morbidity.

S17.5 IS POSTOPERATIVE FATIGUE RELATED TO IMPAIRED MUSCLE ENDURANCE? I. BAUTMANS[1,2], R. NJEMINI[1], B. JANSEN[1], J. VIERENDEELS[1], J. DE BACKER[3], E. DE WAELE[3], T. METS[1,2] *(1. Frailty in Ageing Research Group, Vrije Universiteit Brussel, Brussels, Belgium; 2. Geriatrics Department, Universitair Ziekenhuis Brussel, Brussels, Belgium; 3. Department of Surgery, Universitair Ziekenhuis Brussel, Brussels, Belgium)*

Aims: To investigate the relationship of post-operative fatigue with muscle endurance and circulating inflammatory cytokines. Methods: Prospective study including 84 patients (41 female and 43 male, age 24-91 years) scheduled for elective abdominal surgery (42 open and 42 laparoscopic). All patients were assessed one day before and 2 days after surgery; and if still hospitalized at day 4 (N=78) and day 7 (N=50) post-surgery. Outcome measures were self-perceived fatigue (Profile of Mood State), Fatigue Resistance (FR, time during which grip strength drops to 50% of its maximum), Grip Work (GW, work output delivered by the muscles during the FR-test), VAS for Pain and circulating Interleukin (IL)-6 and Tumor Necrosis Factor (TNF)-alpha. Data were analyzed using ANOVA for Repeated Measures, and correlations for changes over time were computed between perceived fatigue and the other outcome parameters. Results: All outcome-parameters worsened significantly (p<0.01) after surgery and remained significantly (p<0.05) worse until the 7th day post-surgery, except for TNF-alpha which did not change significantly. Changes in perceived fatigue from pre-surgery to day4 post-surgery correlated significantly (p<0.05) with changes in FR, GW and IL-6 but not with pain and TNF-alpha. When stratifying according to age (<60, 60-75 and >75), patients aged >75 years worsened significantly more and recovered significantly less rapidly for FR at day4 post-surgery compared to the younger patients (p<0.05). No significant interactions with type of surgery were found. Conclusions: Post-operative fatigue is related to reduced muscle endurance and elevated IL-6. Elderly patients show a higher impact of surgery on muscle endurance.

S18 THE CARDIO-VASCULAR SYSTEM (PART I)

S18.3 THE MULTIDIMENSIONAL PROGNOSTIC INDEX (MPI) PREDICTS MORTALITY IN OLDER PATIENTS WITH HEART FAILURE: A 6-MONTH FOLLOW-UP STUDY. A. PILOTTO[1], F. ADDANTE[1], M. FRANCESCHI[1], G. LEANDRO[2], G. D'ONOFRIO[1], L.P. D'AMBROSIO[1], M.G. LONGO[1], L. CASCAVILLA[1], F. PARIS[1], A.M. PAZIENZA[1], B. DALLA PICCOLA[3], L. FERRUCCI[4] *(1. Department of Medical Sciences, Geriatric Unit, & Gerontology and Geriatrics Laboratory,, San Giovanni Rotondo, Italy; 2. Biostatistics & Gastroenterology Unit, IRCCS Saverio De Bellis, Castellana Grotte, Italy; 3. Department of Research, CSS Mendel Institute, Rome, Italy; 4. National Institute on Aging, Longitudinal Studies Section, Harbor Hospital Center, Baltimore, MD, USA)*

Aims: To evaluate the usefulness of a Multidimensional Prognostic Index (MPI) based on a Comprehensive Geriatric Assessment (CGA) for predict mortality risk in older patients with heart failure. Methods: 418 elderly patients admitted for heart failure to the Geriatrics Unit were screened. A standardized CGA including ADL, IADL, SPMSQ, MNA, Exton-Smith scale, CIRS, drug use and social support network was used to calculate the MPI for mortality. Three grades of MPI were identified, i.e. low-risk (range=0.0-0.33); moderate-risk (range 0.34-0.66) and severe-risk (range=0.67-1-0). The NYHA was also calculated Using the proportional hazard models we studied the predictive value of the MPI for all cause of mortality and comparison with that of NYHA over a period of 6-month follow-up. Results: 334 patients (M=147, F=187, mean age=80.2±7.2, range 65-100) were included: 114 patients resulted in the low-risk group (MPI =0.23±0.07), 161 in the moderate-risk group (MPI=0.48±0.09) and 59 in the severe-risk group (MPI=0.75±0.06). Higher MPI values were significantly associated with older age (p=0.0001), female sex (p=0.0001) and higher mortality after 30-days (p=0.0001) and 6-months (p=0.003). A close agreement was found between the MPI-estimated and the observed mortality. Age- and sex-adjusted multivariable analysis demonstrated that MPI was significantly associated with mortality after 30-days (OR=2.80, 95%CI=1.65-4.73, p=0.0001) and 6-months of follow-up (OR=1.90, 95%CI=1.30-2.79, p=0.0001). MPI demonstrated an area under the ROC curve higher than NYHA. Conclusions: The MPI, calculated from information collected in a standardized CGA, accurately stratifies hospitalized elderly patients with heart failure into groups at varying risk of mortality.

S18.4 COMPLEX DIAGNOSIS IS FREQUENT IN THE ELDERLY PATIENTS WITH SYNCOPE. RESULTS OF AN OBSERVATIONAL STUDY ON OUTPATIENTS WITH SYNCOPE EVALUATED WITH NEUROAUTONOMIC TESTS. A. UNGAR, A. MORRIONE, A. LANDI, F. CALDI, A. MARAVIGLIA, M. RAFANELLI, E. RUFFOLO, V.M. CHISCIOTTI, G. MASOTTI, N. MARCHIONNI *(Azienda Ospedaliero Universitaria Careggi, Firenze and University of Florence, Italy)*

Aims: to evaluate diagnostic value of autonomic tests in relation with age, the predictors of neuromediated syncope and the presence of complex diagnosis in patients with unexplained syncope after first line evaluation. Methods: indications to neuroautonomic evaluation were: 1. first line evaluation - history, physical examination and ECG ¡V suggestive of neurally-mediated syncope 2. first line evaluation suggestive of cardiac syncope excluded after specific diagnostic tests 3. no certain or suspected diagnostic criteria after the first line evaluation. All patients were evaluated with neuroautonomic tests: Tilt Table Test (TTT) potentiated with sublingual nitro-glycerine, Carotid Sinus Massage (CSM) in supine and up-right position and Orthostatic Hypotension (OH). Results: we enrolled 873 patients (373 men and 500 females, mean age 66,5„b18 years). Neuroautonomic evaluation was diagnostic in 64,3% of the cases. TTT was diagnostic in 50,4%, CSM was diagnostic in 11,8% and OH was present in 19,9%. Predictors of a positive response to TTT were the presence of prodroms and a situational syncope. Age and abnormal ECG were predictors of positivity to CSM. Venous incontinence, alpha blockers, nitrates and benzodiazepines therapy resulted associated with OH. 23% of patients presented a complex diagnosis. The most frequent association resulted the coexistence of vasovagal syncope and OH (15,8% of patients). Complex diagnosis was present in 42,9% patients aged 80 and older; age was the strongest predictor of complex diagnosis. Conclusions: neuroautonomic tests are very useful in patients with unexplained syncope after first line evaluation, especially in elderly. Complex diagnosis is very frequent in older patients

S18.5 LEFT VENRICULAR FUNCTION AS A PREDICTOR FOR FALL INCIDENTS. N. VAN DER VELDE, G. ZIERE, T.J.M. VAN DER CAMMEN, B. HOFMAN, B.H.C. STRICKER *(Erasmus MC, Department of Internal Medicine, Section of Geriatric Medicine, Rotterdam, The Netherlands)*

Objectives: Poor left ventricular function can result in a shortage of cerebral perfusion, especially in physically demanding situations. A typical presentation of episodes of cerebral hypoperfusion would be syncope, however, 50% of older syncope patients does not recall the loss of consciousness and will therefore present with a fall instead. Therefore, we set out to investigate the association between left ventricular systolic function (LVEF) and fall incidence in older persons. Methods: The association between LVEF and falls with serious consequences was tested in the Rotterdam study, a population-based cohort study in 7983 adults age 55 or older. In 2266 participants LVEF was measured with two-dimensional transthoracic echocardiography. Events were defined as a fall leading to hospital admission and/or a fracture during follow-up. Data were recorded between 1991 and 2002. Multivariate adjustment for confounders was performed with a Cox proportional hazards model. Results: Risk of a fall with serious consequences was significantly higher if LVEF was impaired. Trend analysis according to degree of LVEF was significant. The adjusted hazard ratio of a fall was 2.70 for LVEF <35% (95% CI 1.11-6.58) and 1.71 for LVEF 35-50% (95% CI 1.10-2.66). Conclusions: This finding suggests that poor systolic function as measured with LVEF is a risk indicator for fall incidents, irrespective of cardiovascular drug use, hypertension and atrial fibrillation. Although for the clinical implications of this finding further research is needed, it can be speculated that there might be clinical benefit obtainable if systolic function is improved in older fallers.

S19 ACUTE GERIATRICS (PART II)

S19.3 HEART FAILURE IN PATIENTS ADMITTED TO AN ACUTE GERIATRIC UNIT: IN-HOSPITAL AND 6 MONTHS MORTALITY AND RELATED FACTORS. C. RODRIGUEZ-PASCUAL, A. VILCHES MORAGA, E. PAREDES GALAN, M.J. LOPEZ SANCHEZ, A. LEIRO MANSO, M. TORRENTE CARBALLIDO, M.T. OLCOZ CHIVA, J.M. VEGA ANDION, A. LOPEZ SIERRA *(Hospital Meixoeiro, Department of Geriatric Medicine, Vigo, Spain)*

Objectives: To determine causes of in-hospital and six months-mortality in elderly patient admitted with heart failure to an acute geriatric unit. Methods: We analyze 219 consecutive patients admitted from October 2006 to November 2007. All patients received a geriatric evaluation. A logistic regression analysis was used to determine variables that can explain mortality. Results: Of 219 patients, 14% died during hospitalization and 31% during follow-up establishing the global 6 months mortality on 45%. Cause of death during hospitalization was cardiovascular in 85% of cases and to HF in 84.4% but after hospitalization only 44% deaths were due to cardiovascular causes and in 40% due to HF. During hospitalization, factors related with mortality on univariate analysis were ejection fraction, renal failure, diabetes mellitus, atrial fibrillation, moderate or severe mobility problems, dependence on activities of daily living, mean arterial pressure, creatinine levels, and Charlson comorbidity index. On multivariate analysis renal failure, mobility problems and mean arterial pressure were factors wich explain mortality Factors related to mortality during the first 6 months after hospitalization, were anaemia, dementia, literacy, treatment with ARBII inhibitors, mobility problems, dependence in activities of daily living, and Carlson comorbidity index. On multivariate analysis, treatment with ARBII inhibitors, dependence in activities of daily living, and Carlson index were related with mortality. Conclusions: In-hospital and 6 months mortality is very high. Factors related to mortality are cardiovascular during hospitalization but on fllow up, mortality causes are mainly non-cardiovascular. We identified factors wich can explain in-hospital and short term mortality

S19.4 A STUDY OF INPATIENT FALLS IN AN ACUTE ELDERLY GENERAL MEDICAL INPATIENT POPULATION. I. PILLAY[1], J. SAUNDERS[2], J. CUNNIFFE[1], J. COOKE[1] *(1. South Tipperary General Hospital, Ireland; 2. Statistical Unit, University of Limerick, Ireland)*

A restrospective study of 1792 acute medical elderly inpatients was performed to establish the inpatient fall rate, the clinical and economic impact and causes of and circumstances around falls. A ward environmental survey was carried out and current post fall interventions documented. A cost analysis was performed on interventions for the prevention of inpatient falls. The falls rate is 3.95 per 1,000 occupied bed days. Intrinsic patient factors include incontinence, impaired mental state, instability, inadvertent iatrogenic complications and impaired breathing. Age is a significant predictor of falls with an odds ratio of 1.064 95% CI (1.027,1.102), p=0.001, with the risk of a fall increasing by 1.06 per calendar year. Patients fall at night and with increased frequency on Sunday and Monday. Toileting was the most common activity (42%) undertaken prior to a fall. An environmental survey identified bed height, toilet lighting and colour, flooring, chair design and cotside contributing to falls morbidity and mortality, including. There is an apparent 20 fold increase in mortality in fallers. Use of STRATIFY was not a significant predictor of whether a fall occurred (p=0.254) although there was a significant difference in the score between the fallers and non-fallers (p=0.031). Addressing ward environment is likely to be seven times more cost-effective than introducing a falls prevention programme. This study has identified key elements in inpatient fallers within an acute medical inpatient setting and will help to inspire change, both in current work practice and in the physical environment for our older, more vulnerable patients.

S19.5 EPIDEMIOLOGY AND OUTCOME OF NOSOCOMIAL BLOODSTREAM INFECTION IN ELDERLY CRITICALLY ILL PATIENTS. S. BLOT[1], M. CANKURTARAN[2], D. VANDIJCK[1], C. DANNEELS[1], K. VANDEWOUDE[1], R. PELEMAN[3], A.A. PIETTE[4], G. VERSCHRAEGEN[4], N. VAN DEN NOORTGATE[5], D. VOGELAERS[3], M. PETROVIC[5] *(1. Intensive Care Department, Ghent University Hospital, Belgium; 2. Division of Geriatrics, Hacettepe University Hospital, Ankara, Turkey; 3. Department of Infectious Diseases, Ghent University Hospital, Belgium; 4. Department of Microbiology, Ghent University Hospital, Belgium; 5. Department of Geriatrics, Ghent University Hospital, Belgium)*

Background: We investigated the epidemiology and outcome in elderly ICU patients with nosocomial bloodstream infection. Methods: In a single-center, historical cohort study (1992-2006), epidemiology and mortality were compared between middle-aged (45-64y)(n=524), old (65-74y)(n=326), and very old ICU patients (≥75y)(n=134) who developed a nosocomial bloodstream infection during their ICU stay. Results: While the total number of ICU admissions (patients aged ≥45 year) decreased by nearly 10%, the number of very old patients admitted to the ICU increased by 33% between the periods 1992-1996 and 2002-2006. Consequently, among patients with a bloodstream infection, the proportion of very old patients increased significantly from 9.2% in 1992-1996, to 13.9% in 1997-2001, and 17.1% in 2002-2006 (p=0.031). The incidence of bloodstream infection (/1000 patient days) decreased with age: 6.7 in middle-aged patients, 4.3 in old, and 3.8 in very old patients (p<0.001). Mortality rates increased with age: 42.9%, 49.1% and 56.0% for middle-aged, old and very old patients, respectively (p=0.015). Regression analysis revealed that the adjusted relationship with mortality was borderline significant for old age (hazard ratio [HR], 1.2; 95% CI, 1.0-1.5) and significant for very old age (HR, 1.8; 95% CI, 1.4-2.4). Conclusions: Our data demonstrate the growing importance of elderly patients admitted to our ICU. The incidence of nosocomial bloodstream infection was lower among very old ICU patients when compared to middle-aged and old patients. Yet, in case of nosocomial bloodstream infection, the adjusted risk of death is higher among very old patients.

S22 THE CARDIO-VASCULAR SYSTEM (PART II)

S22.3 INTERDISCIPLINARY HOME REHABILITATION OF PATIENTS AFTER STROKE - AN ONGOING RANDOMISED CONTROLLED INTERVENTION TRIAL. A. SKERRIS, P. KJEAR, J. CRISTOFFERSEN, C. SHOU, L.S. SEEST, A. OESTERGAARD, F. RØNHOLT, K. OVERGAARD *(University Hospital of Gentofte, Copenhagen, Denmark)*

Objectives: To evaluate whether interdisciplinary home rehabilitation of patients with acute stroke improved patient independency and were cost-effective. Methods: A Randomised controlled Intervention Trial. Patients >18 years admitted to the stroke-unit. Eligible patients had symptoms of stroke, need of rehabilitation 3 days after admission, lived before admission in their own home and had a modified Rankin Score between 0 and 3. All patients were rehabilitated according to normal procedure, and patients randomised to the intervention group were additionally rehabilitated by an interdisciplinary team at home during admission and four weeks after discharge. Ninety days after the stroke, patients were re-evaluated by their motor capacity, activities of daily living, cognitive status, modified Rankin Score, quality of life, and present residence. Results: In the period 7/2007 to 4/2008, 459 patients were screened, 89 patients met the inclusion criteria, 20 of these patients refused and were excluded. Of the control group 41% were discharged to their own home, 53% were discharged to a 24-hour rehabilitation-centre, 3% were still admitted to hospital and 3% withdrawn. Of the intervention group 60% were discharged to own home, 26% were discharged to a 24-hour rehabilitation-centre, 3% were admitted to hospital and 11% withdrawn. A significant smaller proportion of the home rehabilitated

patients were discharged to a 24-hour rehabilitation-centre compared to controls (p<0.02). Conclusions: Interdisciplinary home rehabilitation of patients with acute stroke improved patient independency and the risk of discharge to 24-hour car were significant smaller. Further results are expected within the following months by completion of inclusion.

S22.4 PERSONAL FACTORS AS PREDICTORS OF HEALTH-RELATED QUALITY OF LIFE (HRQOL) AND DEPRESSION AFTER STROKE. C. DONNELLAN[1], A. HICKEY[2], D. HEVEY[1], D. O'NEILL[1] *(1. Adelaide and Meath Hospital, Dublin, Ireland; 2. Royal College of Surgeons, Dublin, Ireland)*

Background: HRQOL and depression after stroke have mainly been explained by clinical factors. The evidence regarding personal factors as determinants of stroke outcome remains limited. This longitudinal study examined the influence of personal factors and clinical factors on depression and HRQOL after stroke. Methods: Patients (n=153, 49% male, mean age 71 years +/-13.4) were interviewed within 4 weeks of admission (T1) and followed up at 12 months (T2). Personal factors assessed were adaptive strategies (Selection, Optimisation and Compensation 15-item questionnaire (SOC-15)), perceived control (Recovery Locus of Control questionnaire (RLOC)) and socio-demographics. Clinical factors included stroke severity (Orpington Prognostic Score (OPS)) and functional ability (The Nottingham Extended Activities of Daily Living (NEADL)). Outcome measures were the Stroke Specific Quality of Life Questionnaire (SS-QoL) and the Depression Subscale of the Hospital Anxiety and Depression Scale (HADS-D). Results: Univariate analyses showed significant relationships between HRQOL at T2 and HRQOL at T1 (r = .62, p<.001), depression at T1 (r = .41, p<.001) and stroke severity (r = -.30, p<.01). Significant relationships were also found between depression at T2 and depression at T1 (r = .05, p<.001), stroke severity (r = .30, p<.001), perceived control at T1 (r = -.22, p<.05) and functional ability at T1 (r = -.29, p<.01). Multivariate analyses showed that socio-economic status (beta = .21, p<.05) and HRQOL at T1 (beta = .62, p<.001) were significant predictors of HRQOL at T2. Depression at T1 (beta = .49, p<.001) was a significant predictor for depression at T2. Discussion: This current study indicates that an individual's initial HRQOL and socio-economic status are important factors in determining HRQOL one year after stroke.

S23 DELIRIUM

S23.3 THE ROLE OF CYTOKINES IN POSTOPERATIVE DELIRIUM IN THE ELDERLY. B. VAN MUNSTER, J. KOREVAAR, A. ZWINDERMAN, M. LEVI, J. WIERSINGA, S. ROOIJ *(Academic Medical Centre, Department of linical Epidemiology, Biostatistics and Bioinformatics, Amsterdam, The Netherlands)*

Pro-inflammatory cytokines may be involved in the pathogenesis of delirium. The aim of this study was to compare the course of cytokine levels in patients with and without postoperative delirium and to investigate the associations of cytokine concentrations in the different subtypes of delirium. Patients aged 65 years or more admitted for surgery following hip fracture were included from April 2005 till April 2007. Experienced geriatric physicians diagnosed delirium with the Confusion Assessment Method and assessed subtype by the Delirium Symptom Interview of Liptzin. TNF-á, IL-1â, IL-6, IL-8, IL-10 en IL-12 were determined in repeated samples by cytometric bead array immunoassay. 307 samples from 98 patients (mean age 83.9 years, SD 7) were included. Patients with delirium (50) more often experienced cognitive and functional impairment (p<0.001). TNF-á, IL-1â, and IL-10 levels were below the reliable detection level in 96%. Differences between delirious and non-delirious patients were observed in IL-6 (median 51 versus 36 pg/mL, p=0.01) and IL-8 (median 15 versus 9 pg/mL, p=0.03) levels. Changes over time in IL-6 and IL-8 levels in patients with delirium differed significantly from changes in the levels in patients without delirium. The highest levels of IL-6 were present during delirium, and the highest levels of IL-8 were present before the development of delirium. Patients with hyperactive characteristics of delirium showed higher IL-6 levels than patients with hypoactive delirium (p=0.02). IL-6 and IL-8 may contribute to the pathogenesis of postoperative delirium in the elderly. IL-6 may play a role in the hyperactive behavior of delirium.

S23.4 A PROSPECTIVE STUDY OF DELIRIUM SUBTYPES IN OLDER MEDICAL INPATIENTS. S. WHITE, S.O. MAHONY, A. BAYER *(Cardiff University, Department of Geriatric Medicine, Cardiff, UK)*

Objectives: The aim of this study was to investigate delirium subtypes in older medical inpatients and associations with predisposing factors and outcomes. Methods: This was a prospective study of patients aged 75 and over, admitted acutely over a six-month period. Patients were screened for delirium using the Confusion Assessment Method, and confirmed using DSM-IV. Delirium was classified as hypoactive, hyperactive or mixed, based on motor and psychological behaviours. Results: 283 patients were recruited; delirium was confirmed in 106 cases (37%). Hyperactive delirium was less common (25%) than hypoactive (38%) or mixed delirium (37%). 48% of women with delirium were hypoactive, compared to 21% of men; p = 0.015. There was no association with age; dementia or previous delirium; or acute illness severity. Patients with hyperactive delirium had a better functional status pre-admission; p = 0.017. Mixed delirium lasted longer (median 12 days). Hypoactive delirium was detected less often; p = 0.033. Fewer patients with hypoactive delirium were prescribed a neuroleptic; p = 0.007, whereas hyperactive cases were less likely to have cot-sides in place; p < 0.001. There was no association with use of urinary catheters; other forms of restraint; falls or injuries; length of stay or inpatient mortality. Conclusions: The different baseline characteristics suggest that subtypes of delirium may represent distinct entities with their own risk factors and pathways leading to the differing patterns of cerebral dysfunction. Further work on the phenomenology of delirium and the association with underlying pathophysiological mechanisms will be necessary to clarify this further.

S23.5 RISK FACTORS FOR DELIRIUM AFTER HIP FRACTURE. V. JULIEBO[1], K. BJØRO[1], M. KROGSETH[1], A. HYLEN RANHOFF[2], T. BRUUN WYLLER[1] *(1. Ullevaal University Hospital, Department of Internal Medicine and Gerontology, Oslo, Norway; 2. Diakonhjemmet Hospital, Oslo, Norway)*

Objectives: To evaluate risk factors for preoperative and postoperative delirium in a cohort of acutely admitted hip fracture patients. Methods: In a prospective cohort study, 364 patients with hip fracture were included consecutively within 48 hours of admission. Both patients with and without dementia were included. Premorbid cognitive function (IQCODE) and activity of daily living (Barthel) were assessed by proxy information. The primary outcome was delirium assessed daily on weekdays, measured by the Confusion Assessment Methods. Hospital records were reviewed for diagnoses, laboratory results, medications, operation method and physiological variables. Results: Delirium was present in 50 of 236 assessable (21.2 %) patients preoperatively, whereas 68 of 187 (36.4%) patients developed delirium postoperatively (incident delirium). The overall prevalence (delirium at any time) was 46.2% (168 of 364 patients). Multivariate logistic regression identified three independent risk factors for incident delirium: Prefracture dementia (OR 2,9, 95% CI 1,4-6,1), body mass index (BMI) below 20 (OR 2,9, 95% CI 1,3-6,7) and indoor injury (OR 2,9, 95% CI 1,3-6,8). Dementia (OR 3,7, 95% CI 1,6-8,6), indoor injury (OR 4,5, 95% CI 1,3-15,3), and time from admission to operation (OR 1,05 per hour increase, 95% CI 1,03-1,07) were independent risk factors for preoperative delirium. Conclusions: Low BMI is an important risk factor for postoperative delirium, whereas time from admission to operation is a risk factor for preoperative delirium in hip fracture patients. Prefracture dementia and injury occurred indoors are risk factors for both preoperative and postoperative delirium.

POSTERS

P01 BIO-GERONTOLOGY

P01.01 QUALITY OF LIFE IN ELDERLY: A MAJOR ISSUE. A. SOFIA DUQUE, J. SILVESTRE, P. FREITAS, I. PALMA-REIS, J.P. LOPES, A. MARTINS, V. BATALHA, L. CAMPOS *(Centro Hospitalar de Lisboa Ocidental, Lisbon, Portugal)*

Introduction: Elderly usually have significant comorbidities and physicians frequently focus their intervention on treating organic disorders, even though its impact on symptomatology is insignificant. Quality of life (QoL) is therefore overlooked, despite being a major determinant of sense of well being. Objerctives: Evaluation of QoL among very old patients (≥85 years) admitted to a Medicine ward of a central hospital, in the context of comprehensive geriatric assessment (CGA). Methods: in cross-sectional CGA, QoL was investigated through the application of the Barthel (BS) and Lawton & Brody Scales (LBS), and inquiring patients about disabling symptoms. Results: 53 patients were included: average age 89 years, 72% female. Concerning BS, 56,6% were totally independent or presented only mild dependency for daily life activities (DLA); however, greater disability was detected in bath (70% dependent), bladder control (59% permanently incontinent or reporting daily incontinence episodes) and toilet use (51% partially or totally dependent). Concerning LBS, most patients (64%) presented great dependence for instrumental DLA (LS ≤); main disabilities were meal preparation (89%), shopping (82%) and use of transport facilities (76%). Concerning disabling symptoms, most patients complained of vision (70%) and hearing impairment (54%), and osteoarticular symptoms (66%); remarkable prevalence of heart failure symptoms, constipation, insomnia and equilibrium disturbance, were also observed. Conclusions: Despite optimized pharmacotherapy towards multimorbidity, elderly still present significant disability, compromising their QoL. Main problems are functional and mobility decline, urinary incontinence, osteoarticular conditions and sensorial deficits. New preventive and rehabilitation strategies are essential to improve physical functioning and reduce disabling symptoms.

P01.02 ASSOCIATION BETWEEN WALKING SPEED, LIFE SATISFACTION AND SOCIAL PARTICIPATION AMONG FRACTURED ELDERLY. H. EKSTROM[1], S. ELMSTAHL[1], S. DAHLIN IVANOFF[2] *(1. Department of Health Sciences, Division of Geriatric Medicine, Malmö University Hospital, Sweden; 2. Institute of Neuroscience and Physiology, Sahlgrenska Academy, Göteborg University)*

Objectives: to describe the association between physical performance and social participation and health related quality of life (HRQoL), life satisfaction (LS) among fractured elderly. Methods: The study was a population based cross-sectional study including 155 participants aged 60 to 93 years. Participants with an earlier episode of vertebrae, hip, pelvis or ankle fracture performed the tests: walking 15 m, walking 2 x 15 m or Timed Get- Up and- Go (TUG) at a self selected speed. HRQoL and LS were assessed using Short form-12 (SF-12) and Life satisfaction index-A (LSI-A). Social participation was divided in social-, cultural and leisure time activities. Results: Walking tests showed a significant negative correlation with the physical component summery of SF-12 (PCS) varying between -0.64 to -0.65, and for LSI-A between -0.22 to -0.25. In a standard multiple regression model adjusted for significant confounders, WS at 15 m, 2 x

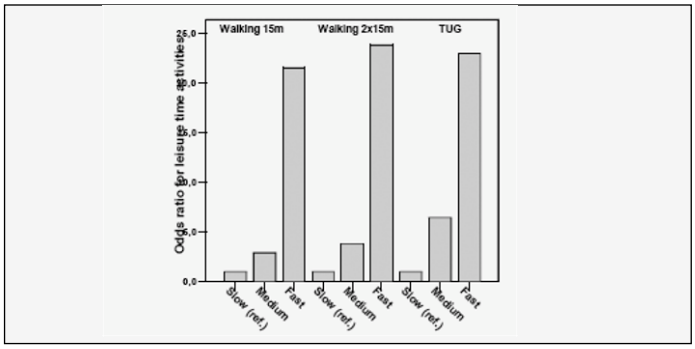
15 m and TUG were associated with levels of (PCS) and WS at 15 m and 2x15 m were associated with levels of LS (Table 1). Among the fastest 97.5% performed any leisure time activity and 77.5% took part in cultural activities compared to 31.4% respectively 28.8% for slow walkers. A logistic regression model, showed that WS could explain participation in cultural- and leisure time activities and TUG could explain participation in leisure time activities (Fig 1).

Table 1
Multiple regression analysis predicting Physical Component Scale (PCS) and Life Satisfaction Index (LSI- A)

	n	Regression Coefficient B	p-value
PCS[A] *(SF-12)*			
Walk 15 m	116	-1.010	<0.001
Walk 2x15 m	116	-0.4 19	<0.001
TUG	144	-0.305	<0.001
LSI-A[B]			
Walk 15 m	116	-0.099	0.016
Walk 2x15 m	116	-0.043	0.018
TUG	146	-0.202	0.212

a, b, Regression coefficient adjusted for a/ age, pain, co-morbidity and marital status, b/ age.

Figure 1
Comparison of odds ratios for participating in leisure time activities with respect to walking speed. Odds ratio adjusted for age and marital status



Conclusions: Walking speed might be associated with quality of life and social participation, and it might be possible to predict social participation using walking tests and TUG.

P01.03 IMPORTANT BIPHASIC ROLE OF INSULIN IN ENDOTHELIAL SENESCENCE UNDER HIGH GLUCOSE. T. HAYASHI[1], K. INA[1], H. HIRAI[1], A. IGUCHI[2] *(1. Nagoya University Graduate School of Mediicine, Japan; 2. Aichi Shukutoku University, Japan)*

Background: We examined the effect of insulin and amino acid supplementation on the role of high glucose mediated endothelial senescence. Methods: Human umbilical vein endothelial cells (HUVEC) were investigated for 72 hours under normal and high glucose. Various concentrations of insulin were cultured with or without (w/wo) glucose. The effect of L-arginine and L-citrulline w/wo insulin were investigated. SAβ gal, senescence marker, telomerase, reactive oxygen speicies (ROS), endothelial NO synthase protein and NO metabolites (NOx:NO2-+NO3-)were evaluated. To elucidate the mechanism of insulin action, AMPkinase, LY231913, PI3 kinase inhibitor, Apocynin, NADPH oxidase inhibitor, LNAME, NOS inhibitor and eNOS siRNA were used. Results: High glucose increased SAβ gal and decreased telomerase activity, and further, it increased ROS levels and decreased endothelial NOS and NO release. Co-administration of low concentration of insulin, under high glucose condition, decreased SAβ gal and ROS levels and increased endothelial telomerase and NO release. AMP kinase agonist, Aicar showed same effect. eNOS SiRNA treatment or LY231913 abolished this effect. However, higher dose of insulin increased SAβ gal. eNOS SiRNA did not affect it. L-arginine and L-citrulline combination did not affect ROS, however replenishment of NO and partial increase of telomerase activity were obtained. The Apocynin decreased SAβ gal and partially prevented ROS and the effect was synergistic with insulin effect. Conclusion: Our results suggest that HG enhances cellular senescence and insulin w/wo L-Arg and L-Cit was able to alleviate endothelial dysfunction. High concenration of insulin enhanced cellular senescence by other mechanism than eNOS.

P01.04 NUTRITIONAL PROFILE AND GFR IN OLDER REHABILITATION PATIENTS. T. LEE, P. GALLAGHER, E. HEGARTY, M. O' CONNOR, D. O' MAHONY *(Cork University Hospital, Ireland)*

Objectives: The Modification of Diet in Renal Disease (MDRD) formula is increasingly used to estimate glomerular filtration rate (GFR). However, the MDRD does not consider patient weight or nutritional status, which show marked heterogeneity in older people. We compared the GFR determined by MDRD and the Cockcroft-Gault formula (which includes patient weight) in a sample of medically stable older patients in a rehabilitation unit. Methods: 101 patients were assessed using the Mini-Nutritional Assessment Tool (MNA). Weight, serum creatinine and Charlson Co-morbidity Index were recorded. The MDRD and Cockcroft-Gault formulae were used to estimate GFR. GFR >60/ml/min/1.73m2 was considered normal. Results: 98 patients completed the MNA, mean(SD) age 80(73-87) years, 51% female. 13 patients had a normal MNA, 85 were either malnourished or at risk of malnutrition. Co-morbidities were not significantly different between these groups. The median(SD) eGFR was 67(53-81)ml/min/1.73m2 using MDRD. The median(SD) GFR was 50(37-63)ml/min using Cockcroft-Gault formula. There was a significant difference in GFR determined by MDRD and Cockcroft-Gault($p<0.001$). Poor nutritional status was associated with higher 'normal' eGFR using MDRD versus Cockcroft-Gault($p<0.001$). Conclusions: The majority of rehabilitation patients were poorly nourished according the the MNA. Poor nutritional status was associated with a higher proportion of 'normal' eGFR values using MDRD. Cockcroft-Gault identified more renal dysfunction in the malnourished group than the MDRD. MDRD and Cockcroft-Gault measures of renal function are not interchangeable. Caution is required when estimating GFR in poorly nourished older people.

P01.05 THE CAPACITY OF IMPLEMENTING MADRID INTERNATIONAL PLAN OF ACTION IN RUSSIA. O. MIKHAILOVA, V. KHAVINSON, L. KOZLOV *(Saint Petersburg Institute of Bioregulation and Gerontology, Russian Federation)*

In 2007 the Madrid International Plan of Action celebrated 5 years. The follow up of results at all levels from local to global took place. UNECE Ministerial Conference was organized thereto in Leon (Spain) in November 2007. Its participants discussed implementation efforts regionally and outlined steps for the years ahead. This discussion resulted in the Declaration «A Society for All Ages: Challenges and Opportunities». It stresses that research is vital to the development of effective policies and programmes. Health care system development and promotion of healthy life style during the whole life course were recognized to be of great importance. Recent demographic situation in Russia is characterized by a high rate of premature mortality due to biological and external factors, decreased birth rate, decreased average life-span; all these alongside with growing number of aged people lead to depopulation and labor force deficit. Immediate measures are needed to prevent premature aging and age-related diseases. 30 years of clinical studies showed that one of the available methods for improving quality and active life span is application of bioregulators, designed at IBG. Administration of these preparations in aged people contributed to restoring functions of the main organism systems and to almost 2-fold decrease in morbidity and mortality rate. We developed a Programme “Prevention of age-related pathology and accelerated ageing, reduction of premature mortality rate due to biological factors, and expanding working age for population of Russia. The objective of this concept is to improve health and quality of life of aged people.

P02 BLOOD PRESSURE

P02.01 IMPORTANCE OF STANDING BLOOD PRESSURE (BP) IN THE MANAGEMENT OF HYPERTENSION IN THE ELDERLY. N.R. CHOPRA, D.A. JONES, F. HUWEZ *(Basildon Hospital, Department of General Medicine, Basildon, United Kingdom)*

Background: Over one third of people aged over 65 years fall each year, accounting for approximately 10% of visits to the emergency department and 6% of urgent hospitalisations among the elderly. The National service Framework for Older People in 2001 emphasised the importance of fall prevention and reducing subsequent injuries. However, there are widespread and forceful policies to treat cardiovascular risk factors, especially hypertension. Evidence for hypertension treatment in the very elderly is controversial. The recent HYVET study showed benefits in people over 80 years. Postural hypotension is a recognised complication, due to impaired baroreceptor and sympathetic responsiveness. Objectives: To see if elderly hypertensive patients admitted with falls are being monitored for postural hypotension. Methods: Retrospective collection of 117 consecutive elderly patients (aged > 78 years) admitted to our hospital for falls, acute confusion or inability to manage because of falls. Results: 57% were men with a mean age of 84 years (range of 78-98). All were treated for hypertension but standing BP was measured in only 21 (18 %) patients. In 32 (27 %) anti-hypertensives were completely withdrawn, and in 49 (42%) these drugs were reduced. Subsequently 75% of patients were discharged home but 29 (25 %) were discharged to residential homes. During hospital stay 29 (25%) patients suffered recurrent falls. Conclusions: This audit clearly shows in elderly patients admitted with falls, the standing BP should be a guide for pharmacological intervention to avoid falls and provide postural stability.

P02.02 ORTHOSTATIC HYPOTENSION - HOW SHOULD WE MEASURE? J. FRIMANN, M. KOEFOED, R. MEYLING, E. HOLM *(Roskilde Hospital, Department of Geriatrics, Roskilde, Denmark)*

Objectives: Our hypothesis is that we may miss diagnosing orthostatic hypotension in some patients because the method we use is not sensitive enough. In the traditional use of Schellongs test, the patient has to get up and stand actively. Bloodpressure is measured during 3 minutes, but not continuously. The risk of missing a temporary low bloodpressure is obvious. In Head Up Tilt test (HUT) the patient is passively tilted to 60 degrees and heart rate and blood pressure is monitored continuously (beat to beat variation). Our aim is to test the hypothesis that there is a significant difference between the orthostatic drop in blood pressure measured by using Schellongs test compared to

HUT. Methods: In a pilot study we will examine 20 patients who have been referred to a geriatric dayhospital because of falls. The patients will be examined with both Schellongs test and HUT in random order. Patients will be supine for 5 minutes and thereafter actively move to standing position (Schellongs test) or be passively tilted(HUT). Bloodpressure will be monitored for 3 minutes. In HUT the largest drop in systolic and diastolic bloodpressure registrated as a mean of 10 pulsewaves will be calculated. Results: we have no results yet. Conclusions: This is a pilote study and the results are supposed to help us designing a proper dimentioned study, to be able to conclude if we should leave the traditional way of measuring orthostatic hypotension in the diagnostic workup for falls.

P02.03 BLOOD PRESSURE LEVEL AND BODY BUILD PARAMETERS OF HOME-DWELLING ELDERLY PATIENTS. B. GRYGLEWSKA, J. SULICKA, M. FORNAL, B. WIZNER, T. GRODZICKI *(Jagiellonian University Medical College, Department of Internal Medicine and Gerontology, Kraków, Poland)*

Objective: Assessment of the body build parameters among the elderly patients as a determinant of blood pressure level. Design and Methods: The study was performed among home-dwelling patients older than 60 years old. Blood pressure (BP) and weight, height and waist circumference (WC) were measured. Body mass index (BMI) and amount of adipose tissue were calculated. BMI 25,1-29,9 kg/m2 were considered as overweight and ≥30 as obese. WC ≥88cm for women and ≥102cm for men were criterions of visceral obesity. The blood pressure measurements and body build parameters were compared between two age groups: 61-80 and > 80 years. Results: 24 646 patients aged between 61 and 102 years, (mean age-70,6,SD-6,5years) were examined, 59,5% were women.Most of the home-dwelling elderly were overweight and obese, irrespective of age (78,3% vs 67,6%, p<0,001). There was observed significant (p<0,001) correlation between BP values (both systolic and diastolic) and BMI, AT and WC circumference among younger as well as older studied subjects. Conclusions: The epidemic of obesity observed in the elderly population might have an impact on the blood pressure level and the cardiovascular risk.

	Age - 61-80 years (n=22706)	**Age > 80 years (n=1940)**
Systolic BP [mmHg]	153,7 ± 21,3	154,0 ± 22,8
Diastolic BP [mmHg]	89,0 ± 12,2	86,8 ± 12,9 ***
BMI [kg/m2]	28,2 ± 4,3	27,2 ± 4,2 ***
AT [kg]	28,3 ±11,3	25,5 ± 11,1 ***
WC [cm]	90,9 ± 12,5	86,6 ± 12,4 ***
Visceral obesity [%]	30,9	22,1***

** - p<0,01, *** - p<0,001

P02.04 STROKE PATIENT KNOWLEDGE OF HYPERTENSION AFTER DISCHARGE FROM HOSPITAL. L. O'CONNOR, M.-T. LONERGAN, N. COGAN, T. COUGHLAN, D. O'NEILL, D.R. COLLINS *(Stroke-Service/ Age-Related Health Care Adelaide & Meath Hospital, Dublin, Ireland)*

Introduction: Hypertension is the most prevalent and modifiable of cardiovascular risk factors but patient awareness of its importance may be poor even after a stroke (1). It is a principle target for patient education and intervention in our stroke service. We assessed knowledge among our community patient population after discharge from hospital. Methods: Stroke patients returning to our clinic 1-2 years after stroke were invited to complete an anonymous questionnaire. Results: 100 patients participated. 56% aware term "hypertension" means blood pressure. 14% unaware hypertension can be asymptomatic,11% unaware of any symptoms of hypertension. 90% aware lowering blood pressure could improve health. 65% patients realised blood pressure was a risk factor for heart attack and stroke, 8% stroke only, 9% heart attack only and 9% were unaware of the risks of hypertension. 27% aware of current BP targets. 36 % aware of targets but incorrect range identified. 37% patients unaware of BP targets. Only 30% surveyed knew their recent blood pressure reading. 85% patients aware blood pressure could be controlled but 38% patients were unaware of lifestyle measures to lower blood pressure. 37% patients aware that exercise/diet could be effective in reducing blood pressure. Only 5% aware smoking cessation could help control BP. 27% of those studied were still smoking. Survey highlights that after a stroke secondary preventative advice in hospital, patient knowledge of blood pressure and healthy lifestyle is poor and many continue to smoke. Continued patient education is required after hospital discharge. *1. Croquelois et al.JNNP 2006;77:726-728)*

P02.05 CHANGES IN FREQUENCY OF ORTHOSTATIC HYPOTENSION IN ELDERLY MEN TREATED WITH ALPHA-BLOCKER FOR BENIGN PROSTATE HYPERPLASIA. G.-I. PRADA[1,2], I.G. FITA, S. PRADA[1], A.M. HERGHELEGIU[1], C. DATU[1] *(1. Ana Aslan' National Institute of Gerontology and Geriatrics, Chair of Geriatrics and Gerontology, Bucharest, Romania; 2. 'Carol Davila' University of Medicine and Pharmacy, Bucharest, Romania)*

Prevalence of orthostatic hypotension in the elderly is between 5% and 30%, increases with age and is associated with high mortality. Possible causes: alteration of regulatory mechanisms originating in carotid sinus and several medicines, including alpha-blockers. Objective of the study: to apply a postural exercise program aiming at reducing postural hypotension induced by treatment with alpha-blockers for prostate adenoma. A total of 145 men, age range 65–85 years, were included. They were divided into two age-matched groups, both treated with alpha-blockers and presenting postural hypotension: study group included 67 men that followed the specific postural exercise program and 78 subjects formed control group without exercise program. Exercises: 15 minutes twice daily for a total of one month. We excluded patients with altered cognitive status, severe heart conditions, severe joint diseases, stroke sequelae that could interfere with program. At the beginning of the study t-test for independent samples showed significant orthostatic reduction in systolic blood pressure for both Study and Control Group: t= - 4.640; statistical significance p<0.001; confidence level 95%; confidence interval: -8.2148 and -3.1886. After 30 days of postural exercises we noticed a significant reduction in systolic blood pressure difference between orthostatic and recumbent position in Study Group patients (t-test for paired samples – t= -3.360, p<0.005), but not in Control Group (t=1,437, p=0.161). Clinically, the Study Group subjects tolerated better alpha-blockers treatment for prostate adenoma. In conclusion, addressing one of the most important etiologic factors for orthostatic hypotension, carotid sinus dysfunction, could improve tolerance to treatment with alpha-blockers.

P03 CANCER

P03.01 ISCHAEMIC STROKE ASSOCIATED WITH SUNITINIB THERAPY. M.-T. LONERGAN[1], F. KELLEHER[2], R. MCDERMOTT[2], D.R. COLLINS[1] *(1. Stroke-Service / Age-Related Health Care, Adelaide & Meath Hospital, Dublin, Ireland; 2. Department of Medical Oncology, Adelaide & Meath Hospital. Dublin, Ireland)*

Case: 67 year-old male developed global weaknesss. Examination revealed left hemi paresis and left homonymous hemianopia CT brain/ T2-weighted MRI showed a right parietal infarct. He was normotensive. Routine bloods normal apart from elevated ESR(43 mm/hr) and mild hyperlipidaemia. 24-hour ECG showed sinus rhythm. Carotid dopplers showed < 50% stenosis bilaterally. Transoesophageal echocardioghram normal. Patient commenced on secondary prevention treatment. Stroke classified as ' infarct of undetermined origin' -TOAST . Diagnosed stage IV renal cell cancer 2 years ago. Treated with a right radical nephrectomy and cyclical anti –VEGF receptor therapy. CT showed no further progression of metastatic disease .He developed drug-related hypothyroidism .Clinically well and functionally independent. Sunitinib , a tyrosine kinase inhibitor, extends survival in metastatic renal cell cancer . Inhibits multiple target receptors including vascular endothelial-cell growth factor (VEGF) receptors and platelet derived growth factors. Multi-modal actions affect angiogenesis. Studies have raised concern about the cardiovascular side effects of Sunitinib, including development of impaired left ventricular function and hypertension . Sunitinib has been associated with hypertensive microangiopathic reversible posterior leukoencephalopathy but to our knowledge this is the first reported case of stroke possible associated with its use. There are theoretical reasons why anti-VEGF treatment might be associated with stroke and we feel the recent literature, in conjunction with this case, highlights the need for continued cardiovascular vigilance and provision of appropriate advice and preventative treatments to high risk patients commencing anti-VEGF treatments.

P03.02 USEFULNESS OF FRAILTY MARKERS IN THE ASSESSMENT OF THE HEALTH AND FUNCTIONAL STATUS OF OLDER CANCER PATIENTS REFERRED FOR CHEMOTHERAPY: A PILOT STUDY. F. RETORNAZ[1,2], J. MONETTE, G. BATIST[3], M. MONETTE[2], N. SOURIAL[2], D. SMALL[3], S. CAPLAN[3], D. WAN-CHOW-WAH[1,2], M.T.E. PUTS[2], H. BERGMAN[1,2] *(1. Division of Geriatric Medicine, Jewish General Hospital, McGill University, Montreal, Quebec, Canada; 2. Solidage Research Group on Integrated Services for Older Persons, Centre for Clinical Epidemiology and Community Studies, Jewish General Hospital, McGill University, Montreal, Quebec, Canada; 3. Segal Cancer Centre, Jewish General Hospital, McGill University, Montreal, Quebec, Canada)*

Background: Older cancer patients seen in an oncology clinic seem to be healthier and less disabled than traditional geriatric patients. Choosing the most sensitive tools to assess their health status is a major issue. This cross-sectional study explores the usefulness of frailty markers in detecting vulnerability in older cancer patients. Methods: The study included cancer patients ?70 years old referred to an oncology clinic for chemotherapy. Information on comorbidities, disability in instrumental activities of daily living (IADL) and activities of daily living (ADL), and seven frailty markers (nutrition, mobility, strength, energy, physical activity, mood, and cognition) was collected. Patients were classified into four hierarchical groups: 1- No frailty markers, IADL, or ADL disability; 2- Presence of frailty markers without IADL or ADL disability; 3- IADL disability without ADL disability; 4- ADL disability. Results: Among the 50 patients assessed, 6 (12.0%) were classified into Group 1, 21 (42.0%) into Group 2, 15 (30.0%) into Group 3, and 8 (16.0%) into Group 4. In Group 2, 7 patients (33.3 %) had one frailty marker, and 14 (66.7%) had two or more. The most prevalent of the frailty markers were nutrition, mobility, and physical activity. Conclusions: The assessment of seven frailty markers allowed the detection of potential vulnerability among 42% of older cancer patients that would not have been detected through an assessment of IADL and ADL disability alone. A longitudinal study is needed to determine whether the use of frailty markers can better characterize the older cancer population and predict adverse outcomes due to cancer treatment.

P03.03 COMPARISON OF THE HEALTH AND FUNCTIONAL STATUS BETWEEN OLDER IN-PATIENTS WITH AND WITHOUT CANCER ADMITTED TO A GERIATRIC/INTERNAL MEDICINE UNIT. F. RETORNAZ[1,2], N. SOURIAL[2], V. SEUX[1], J. MONETTE[2], J. SOUBEYRAND[1], H. BERGMAN[2] *(1. Division of Geriatric Medicine, Sainte Marguerite Hospital, Marseilles, France; 2. Solidage Research Group on Integrated Services for Older Persons, Centre for Clinical Epidemiology and Community Studies, Jewish General Hospital, McGill University, Montreal, Quebec, Canada)*

Introduction: Cancer is predominantly a disease in the population aged 65 years and older. Previous studies have suggested that older cancers patients seen in oncology departments are healthy with few comorbidities. Relatively little is known about the health and functional status of older cancer inpatients, especially outside oncology units. The purpose of this study is to compare the health and functional status of older cancer and noncancer inpatients admitted to a geriatric/internal medicine unit. Methods: A retrospective chart review was conducted on inpatients 65 years old and older, who had been hospitalized during a period of 2 years in the geriatric/internal medicine unit. The health and functional status of 144 inpatients with active cancer was compared to that of 682 inpatients without active cancer. Eight domains were compared: functional status, comorbidity, medication, nutritional status, neurosensory deficits, cognition, mood, and mobility. The hospitalization measures (length of stay, death, need for palliative care) were also compared. Results: We found that inpatients with active cancer were younger, had less comorbidity and less cognitive impairment, but were more depressed and at greater risk for malnutrition than patients without cancer. These two groups were similar in terms of functional status, neurosensory deficit, and mobility. Cancer patients had a significantly shorter length of stay, required more palliative care, and were more likely to die during hospitalization. Conclusions: These findings indicate that older cancer patients admitted to a geriatric/internal medicine unit present with multiple active geriatric problems, have characteristics distinct from those of traditional geriatric patients, and require specific care and management.

P04 CARDIOVASCULAR

P04.01 THE PLASMA TOTAL HOMOCYSTEINE LEVEL IN RELATION TO ELDERLY'S CARDIOVASCULAR DISEASE. V. ANDREI, R. PIRCALABU, E. LUPEANU, C. PENA, E. TURCU, I. RADUCANU, A. HNIDEI, B. MOROSANU, P. GHERASIM, D. GRADINARU, M. RACHITA, I. IONESCU *(National Institute of Gerontology and Geriatrics, Bucharest, Romania)*

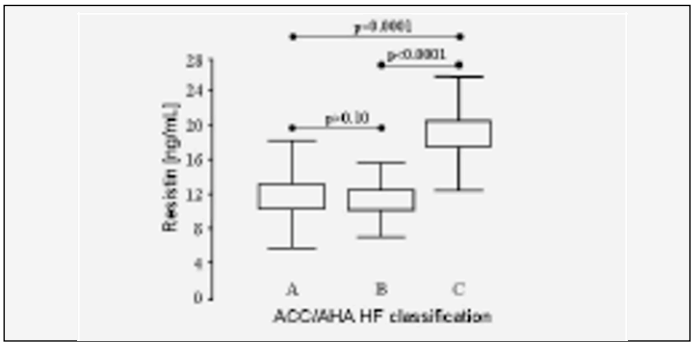
Objectives: Aim of this study was total homocysteine assessment both in healthy elderly without cardiovascular disorders and elderly with cardiovascular pathology. Methodds: The total homocysteine levels were assessed in individuals between 50 and 85 years of age, 50 control subjects selected as according to clinical, hematological, immunological, biochemical and pharmacological criteria of the Seineur protocol and 50 elderly inpatients of the National Institute of Gerontology and Geriatrics Ana Aslan, Bucharest who presented with cardiovascular pathology. To ensure accuracy of data, blood collecting was carried out under standard conditions and requirements of exclusion criteria namely, no use of medication interfering with homocysteine metabolism (carbamazepine, phenytoin, anticonvulsants, penicillin) were met. Plasma total homocysteine immuno-enzyme assays were carried out using Axis-Shild manufactured diagnostics kits. Also, the clinical chemistry panel comprising serum glycemia, creatinine, urea, uric acid, total cholesterol, HDL/LDL, triglycerides, alkaline phosphatase, ALAT and ASAT tests was investigated. Results: For the control group, plasma total homocysteine levels pointed out a tendency to increase with age. In the case of the patients group with cardiovascular pathology, a total homoysteine level increase was shown when compared to that for the control group. Conclusions: Plasma homocysteine levels will be further associated with clinical biochemistry parameters for establishing correlations.

P04.02 ASSOCIATION BETWEEN SLEEP AND CARDIOVASCULAR RISK FACTORS IN THE ELDERLY. S. ARINO, F. COINDREAU, P. ALCALDE, J. SERRA *(Hospital General de Granollers, Barcelona, Spain)*

Introduction: Sleep deprivation is recognized as a "novel" cardiovascular risk factor (CRF). However, few studies have been done including geriatric population and their results are still controversial. Purpose: To know the association between short sleep duration (< 7 hours) and CRF (hypertension, Diabetes Mellitus (DM), hypercholesterolemia and obesity) by age groups younger and older than 65 years of age. Methods: Observational, case-control study, using secondary analysis of the National Impairment Disability and Health Status Survey. The association between sleep duration (< 7 hours) and HTA DM, hypercholesterolemia, and obesity was established using Odds Ratio (OR) with the 95% of confidence interval (CI). Results: We analyzed 69,555 people, 18,378 (26.4%) older than 65 years of age. Arterial hypertension was present in 9,022 cases (13%), DM 3,658 cases (5.3%), hypercholesterolemia 6,200 cases (8.9%), and obesity 7,687 cases (11.1%). OR for sleep duration less than 7 hours and presence of hypertension, DM, hypercholesterolemia and obesity were 1.64 (CI 1.51-1.78); 1.42 (CI 1.24-1.62); 1.6 (CI 1.47-1.74) and 2.01 (CI 1.87-2.12) respectively in the population younger than 65 years old and 1.10 (CI 1.02-1.18); 1.04 (CI 0.95-1.14); 1.20 (CI 1.10-1.31) and 1.04 (CI 0.96- 1.13) to hypertension, DM, hypercholesterolemia and obesity in people older than 65 years of age. Conclusions: This study shows statistically significant association between short sleep duration (< 7 hours) and HTA, DM, hypercholesterolemia and Obesity in people younger than 65 years of age. This association only remains for hypertension and hypercholesterolemia in the elderly group.

P04.03 PLASMA LEVEL OF RESISTIN IN NON DIABETIC CORONARY ARTERY DISEASE OUTPATIENTS WITHOUT OR WITH LEFT VENTRICULAR DYSFUNCTION. S. BALDASSERONI[1], B. ROMBOLI, C. DI SERIO[2], F. ORSO, S. PELLERITO[2], E. MANNUCCI[1], C. COLOMBI, N. BARTOLI[1,2], G. MASOTTI[2], N. MARCHIONNI[1,2], F. TARANTINI[1,2] *(1. Azienda Ospedaliero-Universitaria Careggi, Department of Geriatric Cardiology, Florence, Italy; 2. University of Florence, Department of Critical Care Medicine, Florence, Italy)*

Background: progression and prognosis of ischemic heart failure (HF) have been linked to several dysmetabolic pathways, involving many adipokines. Resistin, an adipose tissue-derived polypeptide, is increased in patients with coronary atherosclerosis and ischemia-reperfusion injury. Aim of the study was to determine plasma concentration of resistin in patients with coronary artery disease (CAD) without or with left ventricular (LV) dysfunction and its relationship with clinical, instrumental and biohumoral parameters of HF severity. Methods and Results: according to ACC/AHA classification of HF, we enrolled 19 patients in stage A (CAD; no LV systolic dysfunction), 17 patients in stage B (CAD; LV systolic dysfunction; no clinically overt HF), and 19 patients in stage C (CAD; LV systolic dysfunction and clinically overt HF). All patients underwent clinical and echocardiographic examination, including a six minute walking test, routine blood tests and determination of plasma resistin by ELISA (LINCO Research). A statistically significant difference in plasma concentrations of resistin was found in stage C patients compared to A and B (Figure). The difference remained statistically significant even after adjustment (F=4.03; p=0.03) for history of hypertension, NT-proBNP levels, and distance walked in six minutes, all independent predictors of resistin plasma levels. Conclusions: we demonstrated that resistin is higher in CAD patients with clinically overt HF compared to patients with LV dysfunction without signs and symptoms of HF, suggesting that resistin is up-regulated when the disease becomes a systemic disorder. The role of resistin in the pathophysiology of HF should be further investigated.



P04.04. ACUTE EFFECTS OF NICOTINE REPLACEMENT ON THE ENDOTHELIAL FUNCTION OF OLDER ADULTS ON STATIN MEDICATION. P. BARRY[1], S. KINSELLA[2], C. TWOMEY[1], D. O'MAHONY[1] *(1. Department of Geriatric Medicine, Cork University Hospital, Ireland; 2. Department of Renal Medicine, Cork University Hospital, Ireland)*

Introduction: Cigarette smoking is associated with significant cardiovascular morbidity and mortality. Nicotine replacement therapy is commonly used to promote smoking cessation. However, most of the endothelial dysfunction associated with cigarette smoking is related to effects of nicotine on vascular tone and function. Statins improve endothelial function in vascular disease Aims: To identify the acute effects of sublingual nicotine administration on nitric oxide mediated endothelial function in healthy young subjects and in older subjects on statin therapy methods. All subjects were non-smokers. 13 young subjects (Mean age± SD - 27.5 ± 2 yrs) were recruited. Baseline Flow Mediated Dilatation (FMD) was assessed under standardised conditions. Following baseline studies, a 2mg sublingual nicotine tablet was administered and FMD assessed 30 minutes later. The same procedure was replicated in 13 older subjects with a history of hypercholesterolaemia (Mean age ± SD - 71.3 ± 2.0 yrs). All the older subjects were on statins. Blood pressure was continually monitored. Results: There was a reduction in FMD following nicotine administration in the young subjects. The reduction of 1.64% in mean FMD was significant (Mean ±SD - 7.35 [±1.02] at baseline compared to 5.71 following nicotine, Z=-3.180, p<0.005). There was no significant reduction in FMD in the older subjects following nicotine administration. Mean baseline FMD in this group was 4.9 [±1.4]. Conclusions: Sublingual nicotine administration acutely reduced FMD in healthy young adults. However, there was no significant reduction in FMD in older subjects following nicotine. Statin therapy may protect from this reduction in NO mediated vasodilatation.

P04.05 THE IMPORTANCE OF RISK FACTORS FOR CARDIOVASCULAR DISEASES IN THE VERY OLD PATIENTS. A. WALDIR BEZERRA CAVALCANTI TEIXEIRA[1], G. POPESCU[2], E. AZEVEDO[3], J. NOBREGA[4], S. GHIORGHE[2] *(1. 'Fluminense' Federal University, Rio de Janeiro, Brazil; 2. 'Ana Aslan' National Institute of Geriatrics and Gerontology, Bucharest, Romania; 3. Pontifical Catholic University of Rio Grande do Sul, Porto Alegre, Brazil; 4. State University of Paraíba, Campina Grande, Brazil)*

Introduction: The incrimination of risk factors in determining of cardiovascular diseases does not need comments, because it was already proved. Also, it is well known that aging produces age-related changes, which interfere with pathological processes. It is

normal to ask about the role of risk factors in the patients with cardiovascular diseases, especially in a very old age. Aims: The aim of this study was to make an assessment of the value of risk factors in the longevives patients with different cardiovascular diseases.Methods: We studied 86 patients (28 males and 58 females) over 85 years old, with different cardiovascular diseases, in whom were followed: living area (town/country), smoking, dislipidemia, obesity, diabetes mellitus and high blood pressure. Results: We observed a directly relationship between the number of risk factors and the number of cardiovascular diseases, between the number of risk factors and the degree of cardiovascular diseases, it was discovered an contrarily relationship between number of diseases, their degree and the very old age. No significant relationship was discovered between number of risk factors and sex or living area of the patient. Conclusions: In the longevives, the role of the risk factors incriminated in cardiovascular diseases determinism is decreased comparative with degenerative age-related changes.

P04.06 ASSOCIATION OF ANKLE BRACHIAL INDEX AND GERIATRIC SYNDROMES. F. COINDREAU, J. SERRA, O. DUEMS, I. SAEZ, G. CLAPERA, S. ARINO *(Hospital General de Granollers, Barcelona, Spain)*

Introduction: The Peripherical Arterial Disease (PAD) affects the 20% of elderly older than 75 years old. An Ankle Brachial Index (ABI)<0.90 it's diagnosed as PAD. Recent studies associate the relation of (ABI)<0.90 with depression, fall risk, and functional decline. Purpose: To describe the prevalence of PAD using the ABI test, and its association with some geriatric syndromes in patients of a Day Geriatric Hospital. Methods: Observational study, in a two months period. We carried out personal health data, falls history in last year, functional status, [Barthel Index (BI)], cognition [MEC-Lobo test (ML)], depression [Yesavage short form (Ys)] and falls risk [Timed get up and go (Tup > 30 seconds)]. An ABI test with a Huntleigh® Doppler SD-2 8 MHz, blood pressure monitor Omron© M6. Descriptive statistic analysis, standard deviation (SD) The association of ABI and geriatric syndromes was established with P. Mann-Whitney test and Chi2 Pearson. Results: Forty nine patients were evaluated, mean age was 78.4 (59-91), female 57%. The mean (SD) of MEC-Lobo was 22.4 (5.02), Yesavage short form 5.36 (3.33), Barthel Index 77.3 (19.7). Falls 41% and Timed get up and go > 30 seconds 28%. Eleven patients (22.4%) have an ABI<0.90 Non parametric test among ABI<0.90 and ML, BI<60, Ys and Tup > 30 seconds was p=0.53, p=0.03, p=0.18, and p=0.27 respectively. Conclusion: This study founds similar PAD prevalence as other studies, with a high statistical significance among ABI<0.90 and functional decline. Nevertheless, this result was not found in cognitive impairment, depression and fall risk.

P04.07 INFLUENCE OF DIFFERENTIAL BLOOD PRESSURE WITH CARDIOVASCULAR RISK FACTORS IN ELDERLY PATIENTS. F. COINDREAU, J. SERRA, I. SAEZ, O. DUEMS, G. CLPAERA, S. ARINO *(Hospital General de Granollers, Barcelona, Spain)*

Introduction: The European Society of Hypertension (ESH) and the European Society of Cardiology (ESC) guidelines add to the last edition, the presence of elevated differential blood pressure (dBP) defined as SBP-DBP > 55 mmHg, suggesting a harden vascular wall. Purpose: To compare the differences of risk factors (RF) between the ESH and ESC guidelines 2003 and 2007 applying the dBP. Methods: Descriptive study in a two months period of patients (p) admitted in a Geriatric Day Hospital, we carried out personal health data in relation of cardiovascular risk factors [(CRF) hypertension, Diabetes Mellitus (DM), smoke, ischemic cardiophaty, stroke] other variables like a drugs, blood pressure, abdominal perimeter, and blood test. Descriptive statistics analysis was used. Results: Forty nine patients were evaluated mean age was 78.459-91, female 57%, According to the 2003 guidelines, 14.3% (7 p) have one RF (age), 51% (25 p) have two RF, 34% (17 p) have three or more RF or DM. Differential blood pressure its detected in 85% (42 p). Introducing the 2007 guidelines 6.1% (3 p) have one RF, 10.2% (5 p) have two RF and 83.7% (41 p) have three or more RF. Conclusions: In this study the differential blood pressure modify the agrupation of risk factors in these two different guidelines. Its to advise these measure in elderly patients apart from the systolic and diastolic blood pressure to adjust the CRF and to optimize the therapy.

P04.08 CARDIOGENIC SHOCK AND EARLY REVASCULARISATION-A DISTRICT GENERAL HOSPITAL PERSPECTIVE. D.A. JONES[1], N.R. CHOPRA[2], K. GUHA, P. CLARKSON (*1. Papworth Hospital, Papworth Everand, Cambridge, UK; 2. Basildon Hospital, Nethermayne, Basildon, Essex, UK)*

Objectives: Cardiogenic shock is the leading cause of death among patients with acute myocardial infarction, with high mortality if managed conservatively. Studies have demonstrated a survival benefit from early revascularisation compared to medical therapy, an approach most beneficial in <75 years old. However benefit exists for individuals >75 years of age, a practise less commonly performed in UK. We audited the management of cardiogenic shock in our DGH to see if >75s received suboptimal care compared to their younger counterparts. Methods: Retrospective case note review of 52 patients with cardiogenic shock from 2002 to 2007. Cardiogenic shock was defined by a systolic blood pressure of 90 mm Hg for > 1 hour, unresponsive to fluid challenge, thought to be secondary to cardiac dysfunction, and associated with signs of hypoperfusion. Results: 65% were male with an average age of 77 (range 40-90). 20 people were aged <75, and 32 above. In the <75 group, 9 (45%) patients were considered for urgent revascularisation, with 7 transferred acutely (< 24 hours). All received intervention and were alive at both 30 days and subsequently at 1 year. In patients >75, 2/32 (6%) patients were considered for urgent revascularisation, however neither was transferred. IHM for >75s was 30/32 (94%) compared to 9/20 (45%) for <75s. Conclusions: Elderly patients with cardiogenic shock are less likely to be managed with angiography, intra-aortic balloon counterpulsation, and revascularization. They should be considered for early revascularisation because if selected appropriately may have a similar survival benefit to their younger counterparts.

P04.09 AN ASSOCIATION BETWEEN SMALL DENSE (SD) LDL-C AND ATHEROGENIC RISKS. T. KOGA[1], N. FURUSYO[1], E. OGAWA[1], Y. SAWAYAMA[1], M. AI[1], S. OTOKOZAWA[1], E.J. SCHAEFER[2], J. HAYASHI[1] *(1. Department of General Medicine, Kyushu University Hospital, Fukuoka, Japan; 2. The Lipid Metabolism Laboratory, HNRCA, Tufts University, Boston, USA)*

Objectives: sd LDL-C has been highlighted as a new atherogenic factor. The aim of our study was to evaluate the association between sdLDL and carotid atherosclerosis risk factors in Japanese residents. Methods: We investigated 1,678 residents (494 men, 1,184 women ,26-78 years old) in the suburbs of Fukuoka prefecture in Kyushu, Japan. sdLDL was measured by using heparin-Mg precipitation followed by direct measurement. Carotid atherosclerosis for each subject was assessed by mean intima-media thickness (IMT) by B-mode ultrasound imaging. Results: Mean sdLDL levels of men (41.1 mg/dl) significantly higher than those of women (29.5 mg/dl). The mean sdLDL levels of women with 50 or over years (35.4 mg/dl) were significantly higher than those under 50 years (22.8 mg/dl), although sdLDL levels of men did not increase with age. sdLDL levels had significantly positive correlation with TG, LDL-C and significantly inverse correlation with HDL-C. sdLDL levels significantly increased with waist circumference, body mass index, but not with blood glucose, serum insulin, HbA1c or blood pressure. Subjects with type 2 diabetes, hypertension, metabolic syndrome were substantially higher mean sdLDL levels (mg/dl) than those without these diseases. (43.5, 47.1 and 49.3 vs 40.0, 40.5 and 39.0 for men, 35.8, 40.2 and 46.8 vs 27.9, 29.1 and 29.2 for women , respectively). We found that higher levels in LDL-C and sdLDL were strongly correlated with worsened IMT, implicating progress of atherosclerosis. Conclusions: These results suggest that measurement of sdLDL-C is useful to evaluate atherogenic risks as well as well-known conventional atherogenic risk factors.

P04.10 SERUM ADIPONECTIN AND METABOLIC PROFILE IN ELDERLY HEALTHY AND WITH CARDIOVASCULAR DISEASE. E. LUPEANU, V. ANDREI, E. TURCU, R. PIRCALABU, I. RADUCANU, R. HNIDEI, B. MOROSANU, S. OPRIS, C. IONESCU, P. GHERASIM *(National Institute of Gerontology and Geriatrics Ana Aslan, Bucharest, Romania)*

Objectives: The study has aimed to investigate in healthy elderly and in old patients with cardiovascular disease(CVD): 1)circulating levels of adiponectin and metabolic indicators: glucose, creatinine, urea, uric acid, aspartate aminotransferase, alanine aminotransferase, total cholesterol, HDLc, LDLc, triglycerides, and homocysteine; 2)the relationships of adiponectin with metabolic parameters. Methods: Women and men, ages 40 to over 85 years were enrolled in two major groups: healthy as the control group, and subjects with cardiovascular disease. The clinical chemistry panel was investigated at an Olympus analyzer. Adiponectin and total homocysteine were assayed by ELLISA (R&D Systems; Human Quantikine immunoassay). Results: Serum adiponectin was significaltly higher (p = 0,0290) in heathy subjects of 65-86 year (21,84 +/- 5,24 μg adiponectin/ml) compared with healthy subjects of 40-65 year; (16,78 +/- 5,58 μg adiponectin/ml). In the control group there were a positive correlation of adiponectin with age and HDLc, a negative correlation with triglycerides, and no correlation with total homocysteine. In the CVD group we found out significantly high glucose(p = 0,012), uric acid(p = 0,0028), creatinine(p = 0,0481) triglyceride(p = 0,039) and total homocysteine(p = 0,035) concentrations and a significantly low adiponectin (p = 0,0011) level. We showed significant negative correlations of adiponectin with uric acid and triglycerides. Conclusions: The metabolic profile we found out in our elderly patients with CVD as illustrated by the above parameters, has pointed to a likely association with ischemia. As related to the ischemic CVD we pointed out a significantly inverse relationship of adiponectin with uric acid.

P04.11 HAEMODYNAMIC CONTROL IN HEALTHY ELDERLY. M. MELLINGSAETER[1], T.B. WYLLER[1], A.H. RANHOFF[2] *(1. Ullevaal University Hospital, Oslo, Norway; 2. Kavli Research Center for Ageing and Dementia, University of Bergen, Haraldsplass Hospital Bergen, Norway)*

Objectives: Little is known about changes in haemodynamic variables due to orthostatic stress in the elderly. Falls are common among elderly, and many falls that remain unexplained may be due to cardiovascular instability that is not easily detected by standard clinical assessment. The aim of this ongoing study is to assess the core haemodynamic variables as well as the autonomous nervous system modulation of the circulation in response to orthostatic stress stress in healthy elderly, and later on to relate this to findings in elderly who have suffered a hip fracture. Methods: Healthy individuals, without any medication, aged 65+, are recruited from senior centers and invited to take part in a 3 hour assessment. Heart rate variability, continuous blood pressure, peripheral resistance and stroke volume are recorded during a schedule including tests of cardiovascular autonomic function: Deep breathing, Valsalva maneuver, sustained handgrip test, head up tilt table testing (HUT) involving both 30* and 70*. We use the Task Force Monitor electronic device for non-invasive monitoring and registration. Results and Conclusions: The project is in a pilot phase, assessing the feasibility of the protocol. Our preliminary results indicate that the test procedure is well tolerated by elderly individuals, and that reliable assessments are achieved. More data will be presented at the congress.

P04.12 THE INFLUENCE OF DRUGS THERAPY ON QUALITY OF LIFE IN THE OLD PATIENTS WITH HEART FAILURE. G. POPESCU[1], J. TEIXEIRA[2], S. GHIORGHE[1], E. AZEVEDO[3], A. TEIXEIRA[4] *(1. 'Ana Aslan' National Institute of Geriatrics and Gerontology, Bucharest, Romania; 2. Federal University of Paraíba, João Pessoa, Brasil; 3. Pontifical Catholic University of Rio Grande do Sul, Porto Alegre, Brasil; 4. 'Fluminense' Federal University, Rio de Janeiro, Brasil)*

Introduction: Heart failure (HF) is a frequent disease in the population. The median age of old patients with HF is 74 years old. The diseases lead to a great disability and bad prognosis; the aging process per se play an important role as risk factor for worsening of disease. HF affects the quality of life (QOL) and also determines an expenditure around 2% from health care expenses. The goal: This study demonstrate the possible improvement in results of HF therapy, close related with improvement of QOL in the elderly with HF. Methods: We studied 50 hospitalized patients in Otopeni Clinic of "Ana Aslan" National Institute of Geriatrics and Gerontology during November 2005 - may 2006; the patients were at first episode of discompensated HF, and were discharged in a state of compensated HF. All patients underwent an evaluation for cardiovascular function by echocardiography, daily physical activity as expressed on a specific activity scale (SAS) and six minute walk test, and QOL by Minnesota Living with Heart Failure (MLHF) questionnaire. Results: From our analysis results an overlap between clinical diagnosis of NYHA classification of HF and MLHF score, and important aspects about the effects of different drug classes used in conventional therapy of HF, with target on studied patients' QOL. Conclusions: The number of patients with HF continues to increase, but the recent advances in pharmacotherapy of HF have partially overcome the mortality problem and succeeded in increasing QOL, so be possible also to reduce medical expenses for these patients.

P04.13 QUALITY OF LIFE AND RELATED FACTORS IN ELDERLY PATIENTS ADMITTED DUE TO HEART FAILURE TO AN ACUTE GERIATRIC UNIT. C. RODRIGUEZ-PASCUAL, A. VILCHES MORAGA, M. TORRENTE CARBALLIDO, E. PAREDES GALAN, S. QUINTELA, A. LEIROS, M.J. LOPEZ SANCHEZ, M.T. OLCOZ CHIVA, A. LOPEZ SIERRA, J.M. VEGA ANDION, C. FERNANDEZ RIOS, *(Hospital Meixoeiro, Department of Geriatric Medicine, Vigo, Spain)*

Objectives: To analyze health-related quality of life (HRQL) in geriatric patients admitted to an acute geriatric unit due to heart failure. Methods: HRQL was measured in 103 patients using the Minnesota Living With Heart Failure questionnaire (MLWHFQ). Descriptives, relation with other variables and multivariate analysis are presented. Results: Mean score of HRQL was 34,78+18. The cut point of scores for quartile distribution corresponded to scores of 22, 38 and 48. There were association with functional class (NYHA classification), minimental state examination and Yessavage depression questionnaire scores. There was no relation with mobility index or activities of daily living. On multivariate analysis only NYHA functional class and Yessavage depression questionnaire score remained significant as possible variables influencing on HRQL perceived. Conclusions: NYHA classification and afective estate are varibles mostly influencing quality of laife in geriatric patients admitted due to Herat failure

P04.14 ANTITHROMBOTIC THERAPY IN ELDERLY PATIENTS WITH ATRIAL FIBRILLATION. M. FILIPA SEABRA PEREIRA, E. JORGE, R. DIAS, M. TEIXEIRA VERISSIMO, L. SANTOS, M.H. SALDANHA *(Coimbra University Hospital, Department of Internal Medicine, Portugal)*

Background: The incidence and prevalence of atrial fibrillation (AF) increases exponentially with age. Management is directed to the rhythm and cardiac frequency control and to the thromboembolic prevention. It's unequivocal that oral anticoagulation reduces cerebrovascular events but this therapeutic strategy is under applied in geriatric population. Objectives: Evaluate the thrombotic risk profile and his prognostic value in elderly patients with AF. To determine if the early and late mortality is better between patients treated according the clinical guidelines, looking to the CHADS2 score sensitivity and specificity as thromboembolic events predictor. Methods: The characteristics of 161 elderly patients with AF were evaluated as well as the antithrombotic therapy applied. A clinical follow up was made concerning the mortality and incidence of thrombotic or haemorrhagic events. Results: The majority of patients presented a permanent AF type and about 1/3 of patients had a previously cerebrovascular event history. The global mortality was 48,4% and the thrombotic events about 12%. From the application of the CHADS2 to this group we verified a good correlation between risk score, class and events crises. There was a statistical difference and mortality and survival diagrams rates of patients under the more recent preconized therapy and the rest (33,33% vs. 53,93%; p=0,048). Conclusions: The CHADS2 index is a good predictor of thrombotic events in elderly patients with AF and both scores are good median survival references. Our results reinsure that a correct analysis of antithrombotic therapy in elderly patients is important and conduce to a better late course.

P04.15 AUDIT ON CCF DRUG MANAGEMENT IN OLDER PEOPLE. S. SINHA, P. DAVE, S. HUSSAIN, A. AYUB *(Basildon & Thurrock University Hospitals NHS Trust, Medicinefor Older People, Basildon, Essex, UK)*

Aims & Objectives: To improve practice of treating CCF as per NICE guideline. To find out if patient aged 75 years and over diagnosed with CCF are investigated appropriately and receive optimal treatment as per NICE guidelines, which sets out standards and recommendations. Methods: Audit proforma was designed using FORMIC software and completed using the NICE guidelines for CCF. Data for 46 patients was collected retrospectively and ananlysed by the Clinical Effectiveness Unit. Summary of Results: Only 54% of patients had an echocardiography. Majority of CCF patients had hypertension or IHD. ACEI was prescribed in 87% of the pt. but in suboptimal dose. A large proportion (48%) of the elderly patients had a contraindication to beta lockers. Only 29% of symptomatic patients in spite of ACEI / beta blockers were on spironolactone . Majority of patients with AF were on digoxin.Only 30% of patients with AF were on anticoagulation. Monitoring of renal function was either poor or not recorded. Conclusions: Echocardiogram to all patient of suspected cardiac failure to determine left ventricular systolic/diastolic dysfunction. All patients with CCF (LVSD) should be on ACEI / Beta blockers unless contraindicated. Acceptable side effects are; creatinine up to 50% from base, asymptomatic hypotension/ bradycardia after ACEI / Beta blocker. Spironolactone to all patients who remain symptomatic in spite of ACEI/ beta blockers and Anti-coagulation to all patients with AF/ severe LVSD unless contraindicated.

P04.16 CHARACTERISTICS OF VERY ELDERLY HEART FAILURE PATIENTS ADMITTED TO AN ACUTE GERIATRIC UNIT. A. VILCHES-MORAGA[1], C. RODRIGUEZ-PASCUAL[1], E. PAREDES-GALAN[1], A. LEIRO-MANSO[1], C. GONZALEZ-RIOS[2], M. TORRENTE-CARBALLIDO[1], J.M. VEGA-ANDION[1], M.T. OLCOZ-CHIVA[1] A. LOPEZ-SIERRA[1], M.J. LOPEZ-SANCHEZ[1], M. NARRO-VIDAL[1], Q. GARCIA[2] *(1. Complejo Universitario de Vigo, Geriatrics Department, Vigo, Spain; 2. Complejo Universitario de Vigo, Cardiology Department, Vigo, Spain)*

Objectives: Heart Failure (HF) constitutes a growing source of morbidity and mortality in the elderly. Despite increases in incidence and prevalence with advancing age, few studies have focused on very elderly patients. The objective of this study is to describe the characteristics of elderly HF patients admitted to a geriatric department. Methods: We analysed 200 HF patients admitted to our acute geriatric ward between October 1st 2006 and September 31st 2007. Results: Mean age was 85.9 years, 89% still lived at home, and 77% showed preserved ejection fraction on echocardiography. The main reason for seeking medical attention was shortness of breath at rest (54.8%), while infections represent the most common precipitating factor. An elevated Katz score on 49.1% of individuals indicated moderate disability and 131 developed functional impairment during hospitalisation. Dementia was diagnosed in 24.1% of patients and a further 19.6% of individuals scored below 21 on MMSE, while 88 patients developed delirium. Depression was present in 39 patients and mean MLWHFQ was 36.9. Mean length of stay and Charlson comorbidity score were 10.3 days and 4.47 respectively.19 women and 12 men died. Conclusions: Elders admitted to our department with a diagnosis of HF belong to a group of very elderly individuals with significant comorbidity, physical and cognitive impairment, high mortality and poor quality of life. Our patients are systematically excluded from HF trials and therefore we advocate for the inclusion of "real life" elderly subjects in future HF research.

P05 DELIRIUM

P05.01 MIRIZZI SYNDROME CAUSING DELIRIUM IN AN ELDERLY PATIENT. E. BOZOGLU, A.T. ISIK, B. COMERT, H. DORUK *(Gulhane School of Medicine, Department of Internal Medicine, Division of Geriatrics, Ankara, Turkey)*

Objectives: To present a 77-year-old man who was diagnosed to have delirium due to Mirizzi Syndrome (MS). Methods: A patient was seen with symptoms of sudden change in mental status, nervousness and abdominal pain. Disorientation, psychomotor agitation, irritability, cognitive and perceptual problems, jaundice and Murphy's sign were determined. Results: Laboratory evaluations: total bilirubin:4.1mg/dL, AST:109U/L, ALT:218U/L, ALP:278U/L and GGT:192U/L. USG: hydropic gallbladder and multiple stones fixed in the infundibular area compressing the common hepatic duct and above the obstruction, dilatation of extra hepatic biliary ducts (MS) (Figure 1). Haloperidol started to control his agitation and psychotic symptoms and all of the other drugs were stopped. Patient's neuropsychological status completely resolved. In ERCP, contrast uptake was present until to the common hepatic duct and that the calculi in the cystic duct were compressing the superior portion of the common bile duct (Figure 2). MS was also confirmed during an elective surgery. Discussion: Formerly, delirium was considered a benign, transient, short-lived condition; however, now, this concept has changed significantly based on the observation that patients presenting with delirium during the hospital stay have a worse prognosis, a longer hospital stay, and higher mortality rates. Successful treatment of delirium depends on identifying the reversible contributing factors. Conclusion: To our best notice, this is the first case of MS induced delirium in the literature. In many cases, delirium is mild or transient and benefits from simple therapeutic interventions. Especially in elderly, a comprehensive geriatric assessment is crucial for recognition, prevention, and management of this syndrome.

Figure 1

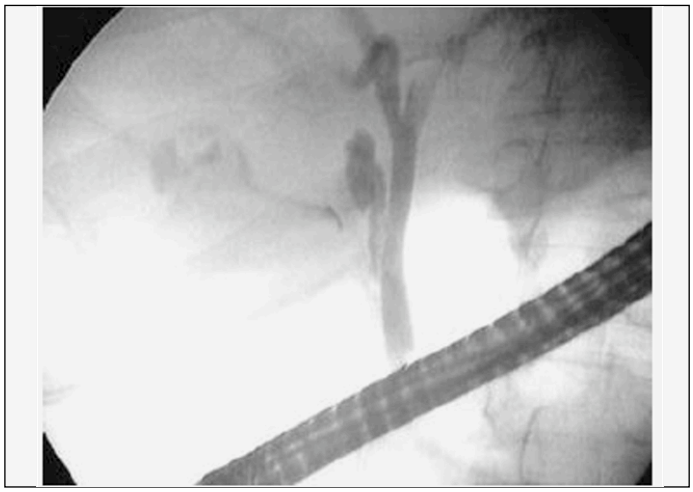
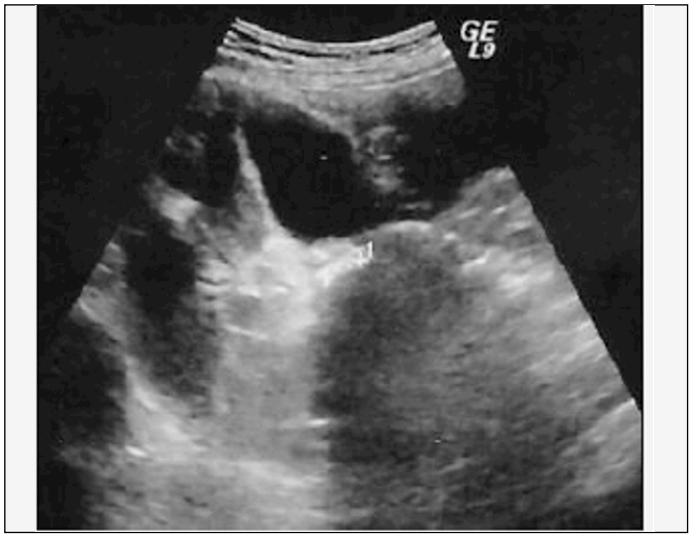


Figure 2



P05.02 HOSPITAL AT HOME FOR ELDERLY PATIENTS IN DELIRIUM. C. SOHRT, P. BRYNNINGSEN, E.-M. DAMSGAARD *(Geriatric Department, Århus University Hospital, Denmark)*

Background: Antipsychotic drugs are often used when older patients become delirious after admission to hospital. Since 1995 we have discharged delirious patients to their own homes with a specially trained nurse assistant from 3 p.m. till 7 a.m. up till three days and without antipsychotic medication. In daytime ordinary home helpers take care. Aims: The aim of this study was to examine how many of the delirious patients were readmitted to hospital, when discharged to their own homes with a nurse assistant. Methods: Diagnosis of delirium was based on the following criteria: intermittent hallucinations, confusion and restlessness with a need for one person around for 24 hours. The home nurse assistant office has a complete list for all patients cared for. The list for 2005 were scrutinized and delirious patients were identified. Information on outcome was obtained from hospital records. Results: 33 delirious patients were discharged to their own home and followed by geriatricians. Patients were non-delirious within 1-3 days. One patient already treated by the gerontopsychiatric department was admitted to that department after few days. One patient was readmitted to the geriatric department for somatic reasons. Five patients were not readmitted to somatic departments, but referral to a psychiatric ward cannot be excluded presently. Conclusions: A very low risk of readmittance to hospital was seen. Elderly patients in delirium seem to recover fast after being discharged to a hospital-at-home regimen.

P05.03 LONG-TERM COGNITIVE OUTCOME OF DELIRIUM IN ELDERLY HIP-SURGERY PATIENTS. A 2.5 YEAR PROSPECTIVE MATCHED CONTROLLED STUDY. M. KAT[1], R. VREESWIJK[1], J. DE JONGHE[1], T. VAN DER PLOEG[1], W. VAN GOOL[2], P. EIKELENBOOM[3], K. KALISVAART[1] *(1. Medical Center Alkmaar, The Netherlands; 2. Department of Neurology, Academic Medical Centre, Amsterdam, Netherlands; 3. Department of Neurology, Academic Medical Center, University of Amsterdam, Amsterdam, The Netherlands)*

Background: Delirium is highly prevalent in elderly patients and associated with morbidity and mortality, increased length of hospital stay and institutionalization. Several studies report high prevalence of cognitive impairment after delirium in heterogeneous patient samples, few studies examined the risk of dementia associated with delirium in elderly hip-surgery patients after one year or more. Aim of this study was to evaluate outcome from delirium in elderly hip-surgery patients. Methods: This is prospective matched controlled cohort study. Hip-surgery patients (n=112) age > 70 who participated in a RCT of haloperidol prophylaxis for delirium, were followed for an average of 30 months after discharge. A diagnosis of dementia or MCI was based on psychiatric interviews. Proportions of patients with dementia/MCI were compared across patients who had postoperative delirium and selected control patients matched for preoperatively assessed riskfactors who had not developed delirium during index hospitalization. Other outcomes were mortalityrate and rate of institutionalization. Results: During the follow-up period 54.9% of delirium patients had died compared to 34.1% controls (relative risk = 1.6, CI: 1.0-2.6). Dementia or MCI was diagnosed in 77.8% of the surviving patients with postoperative delirium and in 40.1% of control patients (relative risk = 1.9, 95% CI = 1.1-3.3). Half the patients with delirium were institutionalized at follow-up vs 28.6% controls (relative risk = 1.8, 95% CI = 0.9-3.4). Conclusions: The risk of dementia or MCI at follow-up is almost doubled in elderly hip-surgery patients with postoperative delirium compared with at riskpatients without delirium. Delirium may indicate underlying dementia. *References: Kalisvaart KJ, de Jonghe JF, Bogaards MJ et al. Haloperidol prophylaxis for elderly hip-surgery patients at risk for delirium: a randomized placebo-controlled study. J Am Geriatr Soc 2005; 53:1658-1666.*

Table 1
Cognitive status, institutionalization and mortality at follow-up for delirium and control patients

	Delirium	No delirium	N	Statistic
Diagnosis				
- No cogn. impairment	6	13		
- MCI-Dementia	21 (5-16)	9 (7-2)	27/22	RR=1.9 (CI: 1.1-3.3)
Alive / deceased	32/39	27/14	71/41	RR=1.6 (CI: 1.01-2.6)
Independent living / institutionalized	19/19	20/8	38/28	RR=1.8 (CI: 0.9-3.4)
IQCODE	3.8 (.94)	3.3 (.61)	27/19	t-test 1.94, P=.06
GDS	2.1 (2.6)	1.2 (1.6)	27/21	t-test 1.45, P=.15
Digit span forward	15.3 (4.1)	16.1 (2.6)	25/21	t-test .74, P=.46
Digit span backwards	7.4 (4.0)	8.7 (3.6)	25/21	t-test 1.1, P=.27
MMSE	22.6 (6.5)	26.2 (3.9)	27/22	t-test 2.4, P=.02
NPI-Q total	5.7 (6.5)	4.1 (5.2)	26/20	t-test .90, P=.37
NPI-Q distress	5.9 (7.3)	4.6 (6.5)	26/20	t-test .62, P=.54

RR = Relative risk, CI = Confidence Interval

P05.04 MORTALITY ASSOCIATED WITH DELIRIUM AFTER HIP SURGERY. A 2-YEAR FOLLOW-UP STUDY. M. KAT[1], J. DE JONGHE[1], R. VREESWIJK[1], T. VAN DER PLOEG[1], W. VAN GOOL[2], P. EIKELENBOOM[2], K. KALISVAART[1] *(1. Medical Center Alkmaar The Netherlands; 2. Department of Neurology, Academic Medical Center, University of Amsterdam, Amsterdam, The Netherlands)*

Background: Delirium is highly prevalent in elderly hospital patients and associated with morbidity, mortality, increased length of hospitalstay and a high rate of institutionalization. Incidencerates for delirium after hip-surgery vary from 5 to 40.5%. The aim of this study was to examine the hazardrisk associated with delirium in hip-surgery patients at 2-year follow-up; and to develop a clinical prediction rule for risk stratification of poor outcome from delirium. Methods: Hip-surgery patients (n=603) aged >70 who participated in a previous RCT of haloperidol prophylaxis for delirium, were followed-up for two years. Predefined risk factors and other potential risk factors for delirium were assessed prior to surgery. Primary outcome was death during the follow-up period. Cox proportional hazards were estimated and compared across patients with and without postoperative delirium during. Results: 90/603 patients (14.9%) died during the study period and 74/603 (12.3%) had postoperative delirium. Deliriumincidence was higher in patients who died (32.2% vs 8,8%). The effect of delirium on mortality was significant after adjusting for predefined deliriumriskfactors and other potential covariates including studyintervention (adjusted Hazard risk=2.04, 95% CI 1.26-3.32). Riskstratification of poor outcome from delirium showed that 11.5% of patients without delirium had died compared to 5% of deliriumpatients with few other riskfactors, 45.7% of with intermediate and 63.6% with high number of riskfactors. Conclusions: Delirium independently predicts mortality at two-years follow-up in elderly hip-surgery patients. The clinical prediction rule, based on readily available clinical data, is a simple method for risk stratification of poor long term outcome from delirium.

Table 1
Univariate and Multivariate Analysis of Time to Death for Hip-surgery Patients (n=603) During 2-Year Follow-up

	Unadjusted data		Adjusted data	
Predictors	**HR (95% CI)**	**P-Value**	**HR (95% CI)**	**P-Value**
Age	1.14 (1.10-1.17)	<.001	1.09 (1.04-1.13)	<.001
Male sex	1.49 (0.95-2.37)	.09	2.56 (1.38-3.70)	.001
Acute admission	4.63 (3.03-7.08)	<.001	1.73 (0.99-3.03)	.06

Predefined risk factors (dichotomous values):				
MMSE	4.31 (2.79-6.67)	<.001	1.67 (0.98-2.83)	.06
APACHE	2.39 (1.89-4.57)	<.001	1.02 (0.62-1.66)	.95
Dehydration	1.03 (0.65-1.62)	.90	0.83 (0.52-1.33)	.44
Visual impairment	4.08 (2.60-6.41)	<.001	2.12 (1.28-3.53)	.004
Postoperative Delirium	4.22 (2.69-6.62)	<.001	2.04 (1.26-3.32)	.004
Haloperidol Prophylaxis*	1.46 (0.92-2.30)	.10	NA	NA

*: data available for randomized patients (n=430) only.

Table 2
Risk Index Performance Predicting 2-Year Follow-up Survival Status

	Died during study period	Survived during study period	RR (95% CI)	PPV/NPV	Sens/Spec
No delirium (Reference)	61 (11.5)	468 (88.5)			
Delirium plus 0-1 risk factors	1 (5.9)	16 (94.1)	0.51 (.08-3.46)	0.06/0.12	0.01/0.97
Delirium plus 2-3 risk factors	21 (45.7)	25 (64.3)	3.96 (2.67-5.87)	0.46/0.12	0.26/0.95
Delirium plus 4-5 risk factors	7 (63.6)	4 (36.4)	5.52 (3.33-9.15)	0.64/0.12	0.10/0.99
AROC=.62 (95% CI .55-.69)					

RR: Relative risk (95% confidence interval). PPV/NPV: Positive/Negative predictive value. Sens/Spec: Sensitivity/Specificity. AROC: Area under the receiver operating characteristic curve. Risk factors: any combination of male gender, age 80 years or over, MMSE<25, Vision impairment or Acute hospital admission. ( ): percentages unless otherwise specified

P05.05 COGNITIVE IMPAIRMENT AFTER DELIRIUM. M. KROGSETH, V. JULIEBØ, K. ENGEDAL, T.B. WYLLER *(Ullevaal University Hospital, Geriatric Department, Oslo, Norway)*

Objectives: To investigate whether delirium in older patients with femoral neck fracture is associated with increased risk of dementia after 6 months in patients free from prefracture dementia. Methods: Prospective follow-up of patients >65 years with hip fracture (n=266), from Ullevaal University Hospital and Diakonhjemmet Hospital,Oslo. In the acute phase, delirium was diagnosed according to the Confusion Assessment Method, and the patients were thoroughly assessed perioperatively and five days postoperatively. A close caregiver described the patients' premorbid cognitive status by the Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE), and function in activities of daily living by the Barthel Index. Cognitive function was measured after 6 months using five validated cognitive tests, and the caregivers provided information on cognitive changes in the period after the fracture using a modified version of IQCODE. On the basis of all available data, an expert panel assessed for each case whether or not the diagnostic criteria for dementia were fulfilled before the fracture, as well as after 6 months. Results: Among patients free from prefracture dementia (n=106), 29 (27.4%) developed delirium in the acute phase. In the delirious group 11/29 (37.9%) had developed dementia after 6 months, compared to 5/77 (6.5%) in the group without delirium, p< 0.001. In a logistic regression model, delirium was the only significant risk factor for dementia after 6 months, odds ratio=15.1, 95% confidence interval=2.6-89.6, adjusted for age, gender, education and pre-fracture IQCODE. Conclusions: Our results indicate that delirium increases the risk of developing dementia after 6 months.

P05.06 NEUROIMAGING STUDIES OF DELIRIUM: A SYSTEMATIC REVIEW. V. SHARMA[1], R.L. SOIZA[2], K. FERGUSON[3], S.D. SHENKIN[4], D.G. SEYMOUR[1], A.M.J. MACLULLICH[6] *(1. Department of Medicine & Therapeutics, University of Aberdeen, Scotland, UK; 2. Department of Medicine for the Elderly, Woodend Hospital, Aberdeen, Scotland, UK; 3. SFC Brain Imaging Research Centre, Division of Clinical Neurosciences, University of Edinburgh, Western General Hospital, Edinburgh, Scotland, UK; 4. Geriatric Medicine, University of Edinburgh, Royal Infirmary of Edinburgh, Edinburgh, Scotland, UK; 5. Department of Medicine & Therapeutics, University of Aberdeen, Scotland, UK; 6. Endocrinology, University of Edinburgh, Queen's Medical Research Institute, Edinburgh, Scotland, UK)*

Objectives: Neuroimaging offers potential in developing a better understanding of the pathophysiology of delirium, but has been under-utilised. To help inform future work, we performed a systematic review of structural and functional neuroimaging findings in delirium. The aims were to categorise and summarise the existing literature, and to determine if this literature provides information on structural or functional brain predictors, correlates, or consequences of delirium. Methods: Studies were identified by comprehensive textword and MeSH-based electronic searches of Medline, Embase, and Evidence Based Medicine reviews combining multiple terms for neuroimaging, brain structure and delirium. Results: Twelve studies met the inclusion criteria. There were a total of 194 patients with delirium and 570 controls. The median number of delirium cases per study was 15 (range 4-69, mean 22.3). Patient ages, populations, comorbidities and identified precipitating factors were heterogeneous. Of the 12 studies, three used CT, three used MRI, four a combination of CT and MRI, one used xenon CT and one used SPECT. Studies found associations between delirium and cortical atrophy, ventricular enlargement and white matter lesion burden. Only two small studies of cerebral blood flow were identified, both suggesting that there may be reduced regional cerebral blood flow, but the data were limited and somewhat inconsistent. Conclusions: The small sample sizes and other limitations of the studies identified in this review preclude drawing any clear conclusions regarding neuroimaging findings in delirium. However, these studies suggest avenues for research with larger sample sizes, more sensitive techniques, and enhanced methods of quantification.

P05.07 PROTEOMICS, A NEW RESEARCH TOOL IN DELIRIUM PATHOGENESIS. B. VAN MUNSTER, M. VAN BREEMEN, P. MOERLAND, D. SPEIJER, S. ROOIJ, M. HOLLMANN, A. ZWINDERMAN, J. KOREVAAR *(Academic Medical Center, Department of Clinical Epidemiology, Biostatistics and Bioinformatics, Amsterdam, The Netherlands)*

The pathophysiology of delirium is poorly understood, although it is a frequently observed postoperative complication in elderly patients. The aim of this study was to compare plasma and serum protein profiles in patients with and without postoperative delirium and to identify protein(s) corresponding to possible observed differences. 32 patients above 65 years with and without delirium after surgery following a hip fracture were included. Serum and plasma samples of eight patients with and eight patients without delirium were selected as testing group. Plasma samples of a second comparable group were selected for validation. An additional sample for both groups was collected after the delirious episode. Proteomic profiling by SELDI-TOF using CM10 and Q10 ProteinChip® Arrays and statistical analysis was done separately for the testing group and validation group. Demographical and clinical characteristics of patients with delirium were not significantly different from patients without delirium, except for the number of medications before admission. Significant protein profiles differences were found in the testing group. The largest difference, found in EDTA plasma using CM10 ProteinChip® Arrays, was confirmed in the validation group. Taking both groups together, three discriminating peaks were found in delirious patients. These peaks presumably correspond to hemoglobin-â (15.9 kDa), its doubly charged ion (7.97 kDa) and its glycosylated form (16.0 kDa). Diagnostic accuracies of these peaks expressed as area under the curve were 0.84, 0.88, and 0.83, respectively (p-values 0.001). Discriminating peaks, probably corresponding to hemoglobin-â, are found in plasma of delirious patients as compared to patients without delirium.

P05.08 VALIDITY OF THE CONFUSION ASSESSMENT METHOD FOR THE INTENSIVE CARE UNIT DUTCH VERSION (CAM-ICU). R.VREESWIJK[1], A. TOORNVLIET[2], M. HONING[2], K. BAKKER[2], T. DE MAN[3], J.F.M. DE JONGHE[1], K.J. KALISVAART[1] *(1. Medical Center Alkmaar Geriatrics; 2. Medical Center Alkmaar Intensive Care; 3. Psychiatric department, GGZ Noord Holland Noord, Alkmaar)*

Background: Delirium is a common problem in hospital settings with a prevalence of 5% to 87%. Early detection in the ICU is a necessary first step for successful treatment and prevention. The CAM-ICU (based on DSM-IV) is an easily administrated instrument. The CAM-ICU is barely being used in Dutch ICU. The aim of this study was to translate, validate the CAM-ICU into Dutch. Methods: The translation of the CAM-ICU done by standard translation guidelines. Secondly the validation study of the Dutch CAM-ICU version itself was preformed in a large Dutch community hospital with a mixed ICU. Results: 30 patients with RASS ^{3} –3 were tested by a geriatrician or psychiatrist (MD) for deliriumsymptoms (DSM IV criteria). The CAM-ICU testing was done independently by a trained researchnurse within the same hour in which the MD tested the patient, as to minimize the bias by fluctuation in deliriumsymptoms. 29 patient were analysed. Delirium (DSM-IV) were 11/29, on CAM-ICU 9/29. Agreement Kappa statistics >0.848. The deliriumrate (DSM-IV) was 37,9%. Conclusions: The translation of the Dutch CAM-ICU showed good correlation with the English version of W.Ely. The validation study showed very good agreement between the clinical diagnoses and the Dutch CAM-ICU. 3 patients were diagnosed differently, 2 had a psychiatric disorder and 1 had been sedated between the two measurements (the last one was excluded). The Dutch CAM-ICU reliably detects ICU delirium. It therefore provides the means for early detection and as a consequence more effective early treatment and secondary prevention of ICU delirium.

Table 1
Patient Characteristics

Variable Characteristics	Value
Age (years; mean + SD)	61,2 + 15,48
Male/female sex (n)	15/14
Days on ICU (days mean+ SD)	16,93+ 22,53
Days in Hospital (days mean+ SD)	46,86+ 44,28
Admitting diagnosis (n[%])	
lung problems	6 [20,7]
malignicy	8 [27,6]
heart/vasculairsystem problems	6 [20,7]
internal problems	6 [20,7]
trauma	2 [6,9]
other	1 [3,4]

Table 2
Performance of clinical diagnosis compared with CAM-ICU

			Delirium CAM-ICU		
			No delirium	Delirium	Total
Clinical Diagnose	No delirium	Count	18	0	18
		% within clinical diagnose delirium	100,0%	0,0%	100,0%
	Delirium	Count	2	9	11
		% within clinical diagnose delirium	18,2%	81,8%	100,0%
Total		Count	20	9	29
		% within clinical diagnose delirium	69,0%	31,0%	100,0%

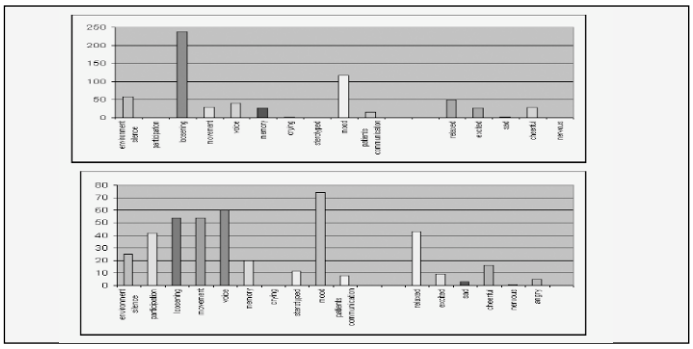
P06 DEMENTIA

P06.01 DIFFERENT CLINICAL PRESENTATIONS OF CREUTZFELDT JACOB DISEASE. M.M. BISSCHOP, R. SIVAL, J. DRIESEN *(Parnassia Psycho Medisch Centrum, Section of Geriatric Medicine, The Hague, The Netherlands)*

Introduction: CJD is a rare rapid progressive neurodegenerative disease, characterized by dementia, dysarthria and movement disorders, which typically culminates in death within six months after diagnosis. CJD can mimic Morbus Alzheimer. Because of the rapid progressive character it is important to minimize misdiagnoses. (1,2,3) We present three cases with different presentation and diagnoses. Cases: 1. A 64 year-old women had a rapid cognitive decline with visual hallucinations and restlessness. 17 days after her admission she died. Diagnosis: CJD. 2. A 69 year-old women presented with gradually cognitive decline with fear and depressive symptoms. Over a period of months she developed ataxia and apraxia. She died 6 weeks later. Diagnosis: CJD. 3. A 75 year-old man with rapidly cognitive impairment and hallucinations with anxiety had a positive 14-3-3 CSF-protein. He developed myoclonic jerks and ataxia and died within six weeks in a mutistic state. Diagnosis: Morbus Alzheimer. Conclusions: CJD has different clinical manifestations. Every clinician should think of CJD when a patient presents with psychiatric or neurologic symptoms combined with rapidly cognitive decline. MRI, EEG and 14-3-3 CSF-protein can support the diagnosis. *References: 1. R. Knight, P. Kevin. Creutzfeldt-Jakob Disease: a rare cause of dementia in elderly persons. Aging and Infectious diseases 2006; 43: 340-346; 2. R. Jardri, C. DiPaola, C. Lajugie. Depressive disorder with psychotic symptoms as psychiatric presentation of sporadic Creutzfeldt-Jakob disease: a case report. General Hospital Psychiatry 2006; 28: 452-454; 3. N. Valadi, JC. Morgan, KD. Sethi. Psychogenic movement disorder masquerading as CJD. J. Neuropsychiatry Clin. Neuroscience 2006; 18(4): 562-563*

P06.02 NON-PHARMACOLOGICAL TEATMENTS FOR THE MANAGEMENT OF THE BEHAVIORAL TROUBLES IN SUBJECTS AFFECTIONS FROM INSANITY OF ALZHEIMER. M. CAPPUCCIO, I. CILESI *(Foundation Gusmini, Alzheimer Center, Vertova, Bergamo, Italy)*

Background: The therapeutic value in the use of non pharmacological therapies with patient affected from senile insanity that present important behavioural troubles assumes important meanings in relationship to the diminution of the pharmacological load administered to the patients. The active and receptive musictherapy, the therapy of the doll and the sand therapies favour dynamics of relaxation e/o of activation according to the therapeutic plan and they can facilitate the activation of memories maintaining so the more possible the cognitive abilities. Methodology: Have been inserted in the experimentation patients that introduced serious behavioural troubles, (wandering, states of nervousness and aggressiveness, apathy, troubles of anxiety and troubles of the sleep) in different non pharmacological therapeutic runs. According to the type of trouble the patients have been treated with different non pharmacological therapies, with therapeutic protocols that foresaw administration codified with weekly lilt or in other cases they foresaw administrations of non pharmacological therapies to the need. The objectives are individual and contemplated to the diminution of the behavioural trouble. Conclusions: The study has underlined the potentialities of the non pharmacological therapies both for the diminution of behavioural troubles or the transformation of the mentioned troubles in behavioural situations surely less disturbing both for the patients and for the operators. The study has underlined besides a diminution of the administered pharmacological loads, in many cases the pharmacology therapy was replaced by non pharmacological treatments with a sure benefit for the quality of life of the patients.



P06.03 THE RELATIONSHIP BETWEEN VITAMIN E AND COGNITIVE IMPAIRMENT IN OLDER PERSONS: THE INCHIANTI STUDY. E. CIRINEI[1], C. RUGGIERO[1], G. DELL'AQUILA[1], B. GASPERINI[1], F. PATACCHINI[1], G. MANCIOLI[1], F. LAURETANI[2], S. BANDINELLI[3], M. MAGGIO[4], L. FERRUCCI[5], A. CHERUBINI[1] *(1. University of Perugia, Italy; 2. Agenzia della Salute Regione Toscana, Italy; 3. ASF Riabilitazione Geriatrica, Firenze, Italy; 4. University of Parma, Italy; 5. National Institute on Aging, MD, USA)*

Objectives: The relationship between vitamin E (VE) and cognitive impairment remains still controversial. Lower VE levels have been associated with poor cognitive functioning and memory performance in older persons. However, other studies failed to confirm these Conclusions: We investigated the relationship between VE levels and cognitive impairment in a population-based cohort study. Methods: We performed a longitudinal analysis in a sample of community-dwelling older persons, participating in the InCHIANTI study, Tuscany, Italy. At enrolment participants underwent determination of circulating VE level and neuropsychological evaluation. We selected subjects aged 60+ years who had baseline MMSE score>23. CI was defined as a decline of at least 2 points of MMSE during 3 years of follow up. A multivariate logistic regression model was used to estimate the independent association between vitamin E levels and incident CI. Results: A total of 695 older participants were selected for this study. They had a mean age of 72 years, mean education of 6 years, a mean MMSE score of 26,5, mean plasma VE level of 30 ìmol/L. Multivariate logistic regression showed that, independent of age, gender, education, lipid levels, heart failure, older participants with higher levels of vitamin E had a lower risk of cognitive impairment (â= -0,0352; p<0.005) after 3 years of follow up. Conclusions: This longitudinal study confirms our cross sectional data showing that higher vitamin E plasma levels might provide significant protection against the onset of cognitive impairment in older subjects.

P06.04 SYSTEMATIC DETECTION OF DEMENTIA AFTER A HIP FRACTURE. A.J. CRUZ-JENTOFT, A. DE TENA FONTANEDA, L. REXACH CANO *(Servicio de Geriatría .Hospital Universitario Ramón y Cajal. Madri. Spain)*

Background: Dementia is undetected in a significant group of older individuals, who cannot benefit of advances in treatment and disease management. We hypothesized that hospital admission for the surgical treatment of a hip fracture could be used for the detection of undiagnosed and untreated cases of dementia. Methods: prospective study of patients older than 69 years admitted to the Orthopaedic Department for the treatment of a hip fracture. A systematic evaluation was performed on admission, to find those with a previous diagnosis of dementia. If not, cognitive decline was suspected in those with a low IQCODE, a low MMSE, or persistent delirium. These were carefully evaluated and followed-up after discharge to determine the exact diagnosis. Results: 179 patients, mean age 83.3±6.8 years; 80.9% women. 24 patients (13.9%) had a previous diagnosis of dementia, 90 patients (52%) did not have a cognitive disorder; and 59 patients (34.1%) had a suspected cognitive decline. Dementia was diagnosed in 20 of the individuals of the later group (11.6% of the total group, for a global prevalence of dementia 25.5%). 25 patients with suspected dementia declined being diagnosed; 7 patients died in hospital; and in 7 a diagnosis could not be made for clinical or social reasons. Conclusions: Hospital admission for the treatment of a hip fracture may offer an opportunity to detect undiagnosed dementia patients.

P06.05 UPPER GASTROINTESTINAL BLEEDING IN ADVANCED DEMENTIA OF ALZHEIMER'S TYPE: CASE REPORTS ON DECISIONS AND COORDINATION OF CARE. R. CUSTURERI, V. CURIALE, C. PRETE, A. CELLA, C. BONOMINI, G. BARBAN, S. TRASCIATTI, E. PALUMMERI *(E.O. Ospedali Galliera, Genova, Italy)*

Objectives: Description of: paths of care, decisions about diagnosis and treatment in sufferers from Alzheimer's Disease (AD) with upper gastrointestinal bleeding. Methods: We report 2 cases of our Geriatric Department with respect to path of care, psychosocial profile, engagement of relatives in decisions, medical history, diagnosis and treatment. Results: 1) age 69, divorced, 2 sons, living in Nursing Home, 5-years history of untreated AD, Clinical Dementia Rating (CDR) 3, able to eat and walk, with abdominal pain and haemoglobin 9.6 g/dl. The relatives were unconcerned in decisions about diagnosis and treatment. He underwent total gastrectomy for cancer and afterwards reoperated for bowel obstruction. He was followed-up in our outpatient facility and underwent oesophageal dilatations procedures for malignant obstruction 9 and 14 months later. The course of his illness was distressing. 2) age 81, living with spouse, 2 caring daughters, 5-years history of AD treated with donepezil, CDR 4, unable to eat and walk, severely impaired, haemoglobin 3.8. After transfusion of 6 erythrocyte units the patient improved and severe behavioural and psychological symptoms of dementia occurred. The family fully participates in decisions and gastroscopy was omitted. We implemented palliative medical treatment. Bleeding, nausea, vomiting, agitation and dyspnoea were controlled in all settings of our Geriatric Department: Acute Care Unit, Home-based service, and in Nursing Home where the patient died 2 months later. Conclusions: these reports are examples of care coordination for AD patients with severe medical complication and underline the role of the family in preserving quality of life.

P06.06 THE RELATIONSHIP BETWEEN URIC ACID, COGNITIVE IMPAIRMENT AND DEMENTIA IN COMMUNITY-DWELLING PERSONS: THE INCHIANTI STUDY. B. GASPERINI[1], C. RUGGIERO[1], G. DELL'AQUILA[1], E. CIRINEI[1], F. PATACCHINI[1], G. MANCIOLI[1], F. LAURETANI[2], S. BANDINELLI[3], M. MAGGIO[5], L. FERRUCCI[4], A. CHERUBINI[1] *(1. University of Perugia, Italy; 2. Agenzia della Salute Regione Toscana,, Italy; 3. ASF Riabilitazione Geriatrica, Firenze, Italy; 4. National Institute on Aging, MD, USA; 5. University of Parma, Italy)*

Objectives: Chronic inflammation increases with aging and is a risk factor for cognitive impairment (CI) and dementia (D). The biological action of uric acid (UA) in humans is controversial since it has been considered an antioxidant. However, preclinical evidence suggests that UA has a pro-inflammatory action, and epidemiological studies found that hyperuricemia is associated with several conditions leading to dementia. We investigated the relationship between UA levels and both cognitive impairment and dementia in older persons. Methods: We performed a cross-sectional study of 1.061 community-dwelling older persons, aged ≥60 years, participating in the InCHIANTI study, a population-based cohort in Tuscany, Italy. At enrollment participants underwent determination of circulating UA levels and neuropsychological evaluation. Dementia was defined according to DSM IV criteria, while CI according to the presence of MMSE <23. A multivariate polychotomic regression model was used to estimate the independent association between UA levels and both cognitive impairment and dementia. Results: Demented persons had higher UA levels (p=0.005), and the prevalence of dementia increased across UA tertiles (p=0.022). Independent of age, sex, education, MMSE, BMI, smoking, energy intake, alcohol consumption, vitamin E and cholesterol plasma levels, renal function, hypertension, cardio- and cerebro-vascular diseases, persons belonging to the highest UA tertile (6.72±1.24 mg/dL) had an eightfold (OR=8.2; 95%CI:3.0-13.3) higher probability to be demented compared to those in the lowest tertile. Conclusion: High circulating UA levels are associated with an increased likelihood to be affected by dementia in a large population based sample of older persons..

P06.07 DEFINING MIXED DEMENTIA: EVIDENCE FROM 156 PROSPECTIVELY ANALYSED CASES. G. GOLD, P. GIANNAKOPOULOS, F. HERMMANN, C. BOURAS, E. KOVARI *(Geneva University School of Medicine and Geneva University Hospitals)*

Objectives: To explore the pathological substrates of mixed dementia, we analysed lacunar and microvascular pathology in 156 autopsied, elderly individuals with various degrees of AD pathology. Methods: Cognitive status was assessed prospectively and rated using the Clinical Dementia Rating (CDR) scale; neuropathological evaluation included Braak neurofibrillary tangle (NFT) and Aß-protein deposition staging and bilateral semiquantitative assessment of microvascular ischemic pathology and lacunes. Sensitivity analysis was performed in a randomized derivation sub-sample and tested in a validation sub-sample. Results: White matter lacunes, periventricular and diffuse white matter demyelination and focal and diffuse cortical gliosis were not associated with cognition. Braak NFT, Aß deposition, cortical microinfarcts (CMI) and thalamic and basal ganglia lacunes were strongly associated with the presence of dementia. Braak NFT, CMI and TBGL thresholds determined in a derivation sample yielded 0.88 sensitivity, 0.79 specificity and 0.85 correct classification rate for dementia in a validation sample. The same thresholds distinguished three groups of demented cases consistent with mixed dementia, pure vascular dementia and AD. Conclusions: These findings indicate that the clinical expression of the vascular component in mixed cases is highly dependent on lesion type and location as well as severity of concomitant AD–related pathology. Proposed thresholds for vascular and degenerative lesions predict the presence of dementia with great accuracy and provide a basis for distinguishing pure vascular or Alzheimer dementias from mixed cases.

P06.08 NO ALTERATION IN QT DYNAMICITY AND HEART RATE VARIABILITY IN ALZHEIMER'S DISEASE. M. HALIL[1], A. DENIZ[1], B. YAVUZ[1], B.B. YAVUZ[1], Z. ÜLGER[1], M. CANKURTARAN[1], M. ISIK[1], E.S. CANKURTARAN[2], K. AYTEMIR[1], S. ARIOGUL[1] *(1. Hacettepe University, Faculty of Medicine, Ankara, Turkey; 2. Ankara Oncology Research and Training Hospital, Ankara, Turkey)*

Objectives: Some epidemiological and clinical data supports the hypothesis that cardiovascular factors are involved in the pathogenesis of Alzheimer's disease (AD). Autonomic-related cardiovascular alterations have been associated with increased cardiovascular risk. It has been demonstrated that cardiovascular abnormalities-pointing to the presence of autonomic-related cardiovascular alterations-such as orthostatic hypotension, carotid sinus hypersensitivity, and age-related falls, appear with high frequency in AD. Preliminary studies have suggested that heart rate variability (HRV) may be impaired in AD. The aim of this study was to show the effects of HRV and QT dynamicity (QTD) reflecting the autonomic cardiac function and myocardial vulnerability in AD. Methods: Thirty-four subjects with AD and 34 controls matched for demographic characteristics and laboratory parameters were enrolled. Each subject underwent clinical and cognitive examination, a structural brain imaging study, transthorasic-echocardiography, electrocardiogram (ECG) and HRV analysis using 24-hour ECG monitoring. Results: No difference in HRV time and domain parameters and QTD parameters was found in patients with AD and controls. Conclusions: Although this study found no significant difference, previous studies examining the relationship between HRV and AD have shown inconsistent. Results: Further studies with large population is necessary for the evaluation of autonomic cardiac function in AD.

P06.09 CHANGES IN COGNITIVE FUNCTIONS OF PATIENTS WITH DEMENTIA OF THE ALZHEIMER TYPE (DAT) FOLLOWING LONG-TERM ADMINISTRATION OF DONEPEZIL HYDROCHLORIDE - RELATING TO CHANGES ATTRIBUTABLE TO DIFFERENCES IN APOE PHENOTYPE. K. KANAYA[1], S. ABE[1] M. SAKAI[1], T. IWAMOTO[2] *(1. Tokyo Medical University, Hachioji Medical Centerm Department of Geriatric Medicine, Japan; 2. Tokyo Medical University, Department of Geriatric Medicine, Japan)*

Objective: We conducted a study of changes in cognitive functions by long-term monitoring of DAT patients to investigate the relationship between the progression of DAT symptoms and the presence of ApoE4. Subjects and Methods: The subjects consisted of 40 DAT patients who had been treated with donepezil for 3 years or more . The MMSE and ADAS-Jcog were conducted annually. The patients were categorized into an ApoE4(+) group having the ApoE4, and an ApoE4(-) group not having that. Changes in initial cognitive function assessment score (0 years) were then studied longitudinally at each stage of the observation period (1 , 2 , 3 years). (Wilcoxon's test) . Moreover, the scores at each time period were compared cross-sectionally between the two groups. (Mann-Whitney U test). Results: (1)MMSE: Significant decreases in scores were observed at the three years time periods in both groups (P<0.01) in the cross-sectional study. In the longitudinal study, the (+) group demonstrated a significantly lower trend (P<0.1) after one year only. (2)ADAS-Jcog: Significantly poorer scores were observed in the (+) group at the three-year point both in the longitudinal and in the cross-sectional study(P<0.05). (3)ADAS-Jcog-Sub-Items: In the longitudinal study ,'Orientation' was demonstrated to be significantly poorer in the (+) group in the third year (P<0.05). Conclusions: ApoE4 was suggested to not only be a risk factor for the onset, but also a risk factor for exacerbation of symptoms with respect to long-term prognosis.

P06.10 DISCONTINUATION OF DONEPEZIL IN A GERIATRIC MEMORY CLINIC. T. KORFITSEN, C. MOE *(Bispebjerg University Hospital, Copenhagen, Denmark)*

Objectives: To investigate if frequency and reason for discontinuing donepezil in case of Alzheimers dementia (DAT) in a geriatric memory unit differ from the discoveries in the phase III examinations where the median age is lower. Methods: Five year long retrospective study of 123 donepezil treated patients diagnosed with DAT or mixed dementia in a geriatric memory unit. The material covers all patients treated with donepezil and surveyed for 12 month during the period 14th March 2001 to 7th April 2006. Results: Of the 123 patients 106 (86%) suffered from DAT and 17 (14%) suffered from mixed dementia. 100 (81%) were female while 23 (19%) were male. The median age was 84 years. 26 (21%) patients discontinued treatment due to AE. The most frequent AE were nausea/vomiting, diarrhea and loss of appetite. For comparison the phase III frequency of discontinuing ranged from 6% to 16%. Conclusions: Based on the frequency of discontinuing the findings point to donepezil treatment being less tolerated by the geriatric group of patients than the younger patient population in the phase III studies. However, this conclusion is only statistically significant to the group of patient administered 5 mg daily if one accounts for the longer period of treatment in this study compared to the phase III studies. The finding is to be taken with some reservation due to selection bias which cannot be disregarded. Many of the patients in a geriatric memory unit suffers from multi morbidity and thus more fragile to homeostatic changes.

P06.11 VITAMIN E ISOFORMS AND COENZYME Q10 IN IN PLASMA OF COGNITIVELY NORMAL, MCI AND AD ELDERLY SUBJECTS: PRELIMINARY RESULTS FROM THE ADDNEUROMED PROJECT. P. MECOCCI[1], F. MANGIAASCHE[1], E. COSTANZI[1], R. CECCHETTI[1], P. RINALDI[1], V. SERAFINI[1], S. AMICI[1], M. BAGLIONI[1], P. BASTIANI[1], S. LOVESTONE[2], ON BEHALF OF ADD NEUROMED STUDY *(1. Institute of Gerontology and Geriatrics University of Perugia, Perugia, Italy; 2. Institute of Psychiatry, King's College, London, United Kingdom)*

Background: Oxidative stress (OS) is a central feature in Alzheimer disease (AD), and Mild Cognitive Impairment (MCI) suggesting that OS is an early event in cognitive decline. However, there is insufficient evidence regarding the relationship between vitamin E, the most powerful chain-breaking non-enzymatic antioxidant and MCI/AD status and progression. In most of the studies only á-tocopherol has been assessed, but other naturally occurring molecules with vitamin E activity have been identified with unique biological functions. Aims: To evaluate plasma level of different vitamin E isoforms (namely and 2.01 (CI 1.87-2.12) respectively in the population younger than 65 years old and 1.10 (CI 1.02-1.18); 1.04 (CI 0.95-1.14); 1.20 (CI 1.10- 1.31) and 1.04 (CI 0.96- 1.13) to hypertension, DM, hypercholesterolemia and obesity in people older than 65 years of age. Conclusions: This study shows statistically significant association between short sleep duration (< 7 hours) and HTA, DM, hypercholesterolemia and Obesity in people younger than 65 years of age. This association only remains for hypertension and hypercholesterolemia in the elderly group.

P06.12 ELDERLY HYPERTENSIVES AND COGNITIVE DISORDERS. G.-I. PRADA[1,2], I.G. FITA[1,2], S. PRADA[1], A.M. HERGHELEGIU[1], C. DATU[1] *(1. "Ana Aslan" National Institute of Gerontology and Geriatrics, Chair of Geriatrics and Gerontology, Bucharest, Romania; 2. "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania)*

Objective of this study: possible effect of hypertension on cognitive disorders in elderly. We included 258 hypertensive patients consecutively admitted to our Institute,

73% women, 27% men, age range 65–91, mean age 78. Three age groups were considered: young-old (65-74 years), old-old (75-84 years), very old (>/=85 years). Blood pressure was measured with a mercury device, with patients seated, and average of three consecutive measurements was recorded. Patients were classified: 7% with mild (140-159/90-99), 37% with moderate (160-179/100-109) and 56% with severe hypertension (>/=180/110). 32% patients treated with monotherapy and 68% with at least two anti-hypertensives. 33% patients had hypertension for less than 5 years, 40% for 5–10 years, and 27% patients for over 10 years. A high prevalence of very high risk patients (81%) was present. Patients with stroke were excluded. Cognitive function was assessed with Mini Mental Status Examination (MMSE), Clock Drawing Test and Five Words Test. Five Words Test revealed 23% prevalence of impairment in those patients that scored >26 at MMSE. t-test showed a statistical significant difference ($p<0.05$) between frequency of MCI (mild cognitive impairment) in general elderly population and our sample. High values of blood pressure correlated with MCI in elderly patients ($r=0.91$). Correlation coefficient increased ($r=0.94$) if the high values of blood pressure were present for more than 5 years. Patients with several drugs to control their blood pressure were more prone to develop MCI. Conclusion: long standing hypertension, high values and less responsive patients all increase risk of developing cognitive disorders.

P06.13 ELDERLY PATIENTS AFFECTED BY DEMENTIA ADMITTED TO MEDICAL HOSPITAL WARD. R. ROZZINI[1], I. SLEIMAN[1], P. BARBISONI[1], A. RANHOFF[2], S. MAGGI[3], M. TRABUCCHI[4] *(1. Department of Internal Medicine and Geriatrics, (Poliambulanza Hospital, Brescia, Italy; 2. University of Bergen, Diacon Hospital, Bergen, Norway; 3. National Research Council, Aging Branch, Institute of Neuroscience, Padova, Italy; 4. Geriatric Research Group, Brescia, Italy)*

Background: The decision about the most appropriate care model for patients affected by severe dementia and acute somatic diseases is a major topic in the discussion regarding hospital processes. The geriatric hospital wards have to face the difficult task of caring for a higher number of old patients with an increase of the average level of illness severity and complexity. For many patients, i.e. those with severe dementia, the effectiveness of hospital admission has not been completely evaluated and new models of care are in the process of being developed. Aims: define the prognosis in hospitalized patients affected by severe dementia in order to tailor specific therapeutical approach. Patients and Methods: We report data from 1310 patients over 65+ (female=67.7%, mean age=79.4+7.8) consecutively admitted to an Acute Care for the Elderly Medical Units (ACE-MU). A multidimensional evaluation was performed. Patients with severe dementia were divided into two groups: those not confined to bed, and those confined to bed. Patients with severe dementia were those with a MMSE lower than 10. The characteristics of these two groups are compared with all the other inpatients. Six month mortality was the outcome measure of our analysis. Results: Patients with dementia and confined to bed have the worst health status: they have the higher impairment in the APS-APACHE II score, the lowest level of serum albumin, hemoglobin, and serum cholesterol, and the highest comorbidity. Six month mortality was 64.4%, 21.1% and 12.5% respectively for patients with dementia and confined to bed, with dementia without being confined to bed, and for the control group. Patients with severe dementia (with or without being confined to bed) have an independent association with increased 6 month mortality. When using the group of patients without severe dementia as the reference group, the RRs and 95% CI of patients with severe dementia, but not bedridden, and of patients with severe dementia and bedridden, were respectively 1.7 (1.0-3.1) and 4.6 (2.8-7.6). Conclusions: Considering that about 65% of patients with severe dementia and confined to bed do not survive for more than 6 months a discussion about which model of care to adopt is needed. An important task for the ACE-MU may be to select, on the basis of a clinical assessment, patients at immediate (6 months) risk of death and thus appropriate for palliative care, from those who may benefit from clinical interventions aimed to modify the natural history of specific diseases. In both cases we may contribute to diminish the patient's level of suffering, respecting the needs of each person by individualizing the care based on an assessment of relevant biological and clinical parameters. Some are requiring palliation, others the most advanced technological and pharmacological management processes. Translating assessment into actions is still more an art than a science. In this perspective our data support the need to consider the single patient as the target of decisional processes rather than adopting general models valid for the entire ward.

P06.14 COGNITIVE VALIDATION OF DOLOTEST® BY COGNITIVE DYSFUNCTIONING PATIENTS. R. SHAFIEI[1], A.H. JOHANSEN[1], C. MOE[1], P. LYNGHOLM-KJÆRBY[2], K. KRISTIANSEN[2] *(1. Bispebjerg University Hospital; 2. www.dolotest.com)*

Objectives: To investigate the correlation between the severity of cognitive dysfunction and the ability to score DoloTest® pain measuring tool correctly. Methods: DoloTest® is a newly developed pain measuring tool, which when it is scored by the patient provides a DoloTest® profile, which quickly gives a visual overall impression of the patients condition, potential focus areas and provide a basis for the planning of realistic treatment. Objectives: The DoloTest® profile's two and three-dimensional figures provide arbitrary measures for each patient, where the patient is his/her own control. The trial is a prospective double blinded study. The data consist of scores from MMSE-tests and score from the cognitive testing of the DoloTest®. Further more data concerning age, gender, type of pain medication is collected. An occupational therapist carries out the MMSE-test. Same day a blinded cognitive test for filling in DoloTest® is performed. A range on in- and exclusion criteria's has been defined. Results: Collection of data started on 1 April 2008 and is expected to be finalized in September 2008. Preliminary results point in the direction that DoloTest® to a wide extent can be used for slightly cognitively disabled patients but that they need more thorough guidance the lower the MMSE score is. Furthermore, slightly cognitively dysfunctioning patients need longer time to fill out a DoloTest® compared to healthy persons. Conclusions: The new pain measuring tool DoloTest® can probably also be used for slightly cognitively dysfunctioning patients, however final documentation for that will not be available until complete data exist.

P06.15 IMPACT OF DEMENTIA IN PATIENTS AND CARERS. C. LESTRUP[1], C. LUND[1], E. JONES[2], P. SUCH[1] *(1. H. Lundbeck A/S, Copenhagen, Denmark; 2. Adelphi Group Products, Bollington, Cheshire, UK)*

Objectives: Data was analysed from a European study, which aimed to investigate the impact of dementia on patients and carers. Methods: In April/May 2006, the Adelphi 'Dementia V' Disease Specific Programme collected data from specialists treating patients aged >50 years with cognitive impairment. Selected specialists received diaries to collect patient record forms for the next 8–10 eligible patients over 2 weeks. Carers were asked to complete a carer self-completion form. Care burden was assessed using the Caregiver Burden Index. Results: In total, 319 specialists obtained data for 1,717 patients with Alzheimer's disease (AD) and 411 carers. At diagnosis a large proportion (41%) of patients were already in the moderate stage of the disease (MMSE 11–20), and exhibiting behavioural and functional problems. Behavioural symptoms of agitation (40%), aggression (43%), and irritability (50%) were higher in moderate compared to mild AD patients, as were problems with daily functioning (60%), e.g., getting dressed, taking medication, etc. Behavioural and personality problems were reported to be the most trouble some symptoms for 27% of carers, second only to cognitive problems (34%). For carers not in residence with the patient, the average time spent caring was 6.6 hours/day. Consequently, 65% of carers reported a decrease in social activities, 40% had given up hobbies, and 11% had received medication for a condition thought to have been induced or exacerbated by their role as a carer. Conclusions: This survey confirms that dementia patients experience significant levels of behavioural and functional difficulty, causing considerable distress to carers.

P06.16 MODERATE ALZHEIMER'S DISEASE AND DEPRESSION IN SPAIN (IDEAL STUDY). CHARACTERISTICS OF THE PATIENTS AND THEIR THERAPY. J.L. TOBARUELA GONZALEZ[1], J. PORTA ETESSAM[2], C. RABES[1] *(1. Hospital Virgen de la Poveda, Madrid, Spain; 2. Hospital Clinico San Carlos de Madrid, Spain)*

Methods: IDEAL is an epidemiological, prospective and multicentric study in which 1413 patients with moderate AD were included by 180 investigators. We analyzed the cognitive and functional status(MMSE and Barthel Index), neuropshychiatric symptoms(NPI-Q & Cornell Scale) and main co morbidities. We also analyzed their pharmacological and non pharmacological therapies. Results: Patients were aged from 46 to 97 years. The average MMSE and Barthel Index scores were 15.4 (+/- 4.4) and 77.8(+/- 2.1). Depression (Cornell Scale score > o =8) was present in 55.2%. The prevalence of other neuropshychiatric symptoms, according to the NPI-Q, were anxiety (55.5%), sleep disorders(43.5%), irritability(50.3%), hallucinations(17.9%), delusions (27.7%) and disinhibition(9.7%). More than a half of these patients suffered hypertension (50.9%), 26.4% had a family history of dementia and 17% of a depressive disorder. One third of the cohort (29.7%) received non pharmacological treatment: 62.4% cognitive stimulation, 51.8% occupational therapy and 27.3% physiotherapy. A high percentage(84.2%) received one or two of the following drugs: memantine 51.4%, donepezil 31.5%, rivastigmine 21.7% and galantamine 17.7%. One fifth (21.5%) received antipsychotic drugs: risperidone(59.4%), quetiapine(16.8%) and haloperidol (15.8%). 45.4% of the patients were given antidepressants: sertraline 20%, citalopram 16.6% and escitalopram 13.9%. The 60.5% received antidepressants. Conclusions: Neuropshychiatric symptoms have a high prevalence in patients suffering from AD and the most common one is depression. We found hypertension and a family history of dementia and depression very frequently. Patients with moderate AD are prescribed drugs in many cases: memantine, donepezil and risperidone are the most common. They also frequently receive non pharmacological treatment.

P06.17 REMINYL ONCE DAILY OUTCOME AND SATISFACTION SURVEY (RODOS) IN MILD TO MODERATE ALZHEIMER'S DISEASE. K. VAN PUYVELDE, T. METS, FOR RODOS STUDY GROUP *(Brussels University Hospital, Department of Geriatrics, Brussels, Belgium)*

Objectives: to record the safety and clinical outcome of a new once daily prolonged release of galantamine in the treatment of mild to moderate Alzheimer's disease as well as caregiver's, patient's and physician's evaluation of treatment in real life settings. Methods: prospective, multi-centre, non-interventional, observational study in 13 centres (geriatrics and neurology) in Belgium. Two groups of patients were compared: galantamine treated patients and a group treated with other standard Alzheimer medication. At baseline functional, cognitive and behaviour assessment was performed and comorbidity, concomitant medication, blood pressure, heart rate and weight were noted. After 2 and 6 months dosage of galantamine, adverse effects, concomitant medication, caregiver's global evaluation and patient's satisfaction with therapy were noted, and at 6 months also a global evaluation of treatment by the physician. Results: 128 patients (mean age 77.9y; SD 6.6y; 42M/86F) were included of whom 110 completed the study. After 6 months of galantamine treatment improvements were noted for MMSE (21.2 to 21.6) and NPIq (14.7 to 13.5); physician's rated global impression as 50% better, 33% unchanged, 20% worse; caregiver's

rated global evaluation as 40% better, 40% unchanged, 20% worse; patient's reported satisfaction with the therapy as 48% better, 47% unchanged, 4% worse. The incidence of side effects with galantamine was 11.7%, which was not different from the other treatments. Conclusions: galantamine once daily is evaluated as beneficial (improvement or stabilisation) by an important part of physicians, caregivers, and patients; side effects are limited.

P06.18 EFFECTS OF ATRIAL FIBRILLATION ON COGNITIVE FUNCTION. B.B. YAVUZ[1], B. YAVUZ[2], M. CANKURTARAN[1], M. HALIL[1], Z. ULGER[1], K. AYTEMIR[3], A. OTO[3], S. ARIOGUL[1] *(1. Hacettepe University, Faculty of Medicine, Department of Internal Medicine, Division of Geriatric Medicine, Ankara, Turkey; 2. Kecioren Research Hospital, Department of Cardiology, Ankara, Turkey; 3. Hacettepe University, Faculty of Medicine, Department of Cardiology, Ankara, Turkey)*

Objectives: Atrial fibrillation (AF) is the most common arrhythmia seen in geriatric patients. It has been postulated that silent cerebral ischemia caused by silent cerebral emboli in AF may lead to cognitive dysfunction. The aim of this study is to examine the relationship between AF and cognitive functions. Methods: Consecutive 1752 patients admitted to our outpatient clinic were enrolled in the study. Twelve derivation electrocardiography (ECG) was performed to each patient. All of the ECG's were analyzed to detect atrial fibrillation. Patients with AF were classified as Group 1 and patients without AF were classified as Group 2. Mini-Mental State Examination Test (MMSE) and clock drawing test were performed in order to evaluate cognitive function. Results: Within 1752 geriatric patients (mean age: 72.1 ± 6.1, 39% male), 114 (6.5%) had AF and put into Group 1. Relationship between AF and MMSE score was analyzed and MMSE score of the Group 1 was found significantly lower than Group 2 (24.9 ± 5.6, vs. 27.2 ± 3.3, respectively; p<0.001). Regression analysis revealed that atrial fibrillation (t= -5.9, 95%CI= 1.4; 2.8, p<0.001) and age (t= -4.8, 95%CI= -0.09; -0.04, p<0.001) were independent correlates of MMSE. Conclusions: The most common arrhythmia seen in geriatric patients may lead to cognitive dysfunction, another common problem in the elderly by causing vascular events and cerebral ischemia. Therefore, it is crucial to determine and manage AF in the elderly population.

P06.19 NEGATIVE INFLUENCE OF IRON DEFICIENCY ON COGNITIVE FUNCTION. B.B. YAVUZ, M. CANKURTARAN, M. HALIL, Z. ULGER, S. ARIOGUL *(Hacettepe University, Faculty of Medicine, Ankara, Turkey)*

Background: Iron deficiency is frequent in the elderly. It was hypothesized that deficiency of iron, which plays an important role in oxygen transport and storage, may lead to cerebral hypoxia and cognitive decline. This relationship which was studied in children and adults was not evaluated in the elderly. Methods: Total number of 2012 geriatric patients admitted for comprehensive geriatric assessment was enrolled in the study. Mini-Mental State Examination (MMSE) and clock drawing tests were performed. Hemoglobin, serum iron, iron binding capacity, and ferritin levels were detected. To asses the effect of iron deficiency on cognitive functions, correlation analysis was performed with ferritin, transferrin saturation, and MMSE score. SPSS 15.0 was used and p<0.05 was considered significant. Results: Mean age of the study population was 72.1 ± 6.4 and 1269 (63.1%) were women. Levels of hemoglobin was 13.8 (7.9-18.2), transferrin saturation was 0.54 (0.03-50.06), ferritin was 62.3 (1.6-559.0), and iron was 119.0 (7.5-397.0). Anemia was diagnosed in 231 (11.5%) patients and 26 (1.3%) were iron deficiency anemia (IDA). Correlation analysis revealed the significant relationship of MMSE with iron (r=0.060, p=0.007) and transferrin saturation (r=0.058, p=0.009). MMSE was significantly lower in the patients with IDA (27 (2-30), vs. 28 (2-30), respectively; p=0.006). Conclusions: This study shows the negative influence of iron deficiency on cognitive functions. As iron deficiency can be easily diagnosed and treated, detecting its effect on cognitive functions is important. Screening for iron deficiency and appropriate treatment should be a routine part of geriatric assessment.

P07 DEPRESSION

P07.01 DOES PROFESSIONAL TRAINING IMPROVE THE DIAGNOSTIC ACCURACY OF DEPRESSION IN THE ELDERLY? RESULTS FROM A CLUSTER RANDOMISED TRIAL. M. DI BARI[1], F. LATTANZIO[2], A. SGADARI[3], M. BACCINI[4], S. ERCOLANI[5], F. RENGO[6], U. SENIN[5], R. BERNABEI[3], N. MARCHIONNI[2], A. CHERUBINI[5], FOR THE DAFNE STUDY GROUP *(1. Department of Critical Care Medicine and Surgery, Unit of Gerontology and Geriatric Medicine, University of Florence and Azienda Ospedaliero-Universitaria Careggi, Florence, Italy; 2. Istituto di Ricovero e Cura per gli Anziani (INRCA) - IRCCS, Ancona, Italy; 3. Centro Medicina dell'Invecchiamento (CEMI), Dipartimento di Scienze Gerontologiche, Geriatriche e Fisiatriche, Università Cattolica del Sacro Cuore, Rome, Italy; 4. Department of Statistics, University of Florence, Florence, Italy; 5. Institute of Gerontology and Geriatrics, Department of Clinical and Experimental Medicine, University of Perugia, Italy; 6. Geriatric Medicine, 'Federico II' University School of Medicine, Naples, Italy)*

Objectives: Depression is a frequent, yet often undiagnosed condition, in old age. To evaluate if a training intervention improves the ability of geriatricians to recognise depression in older persons, a cluster randomised trial was performed. Methods: Geriatricians in 14 clinics were randomly assigned to receive, or not, an educational program on depression. A total of 1,914 outpatients aged 65+ years in both arms, not on antidepressant at entry, were blindly evaluated by the clinic geriatrician, in charge of routine clinical management, and by a field researcher, who formally diagnosed depression using DSM IV criteria, which were taken as the diagnostic gold standard. Results: Compared to the gold standard, sensitivity and specificity were significantly higher in trained than in untrained geriatricians (49 vs. 35%; 91 vs. 88%, respectively; p=0.002). Effectiveness of training was confirmed in models adjusted for age, gender and cognitive performance (p=0.019). Conclusions: The proportion of older persons attending a geriatric outpatient clinic who receive a correct diagnosis of depression is low. However, a specific educational training can improve the diagnostic performance of geriatricians on depression.

P08 DIABETES

P08.01 FOOD FOR THOUGHT: NEAR-NORMOGLYCEMIA AND CARDIOVASCULAR RISK IN TYPE 2 DIABETIC PATIENTS RECEIVING DIFFERENT HYPOGLYCEMIC TREATMENTS. L. DEL BIANCO, C. LAMANNA, F. GORI, M. MONAMI, N. MARCHIONNI, G. MASOTTI, E. MANNUCCI *(University of Florence, Geriatric Unit, Florence, Italy)*

Objectives: Results of the ACCORD trial suggested that a very strict metabolic control in high-risk type 2 diabetes could be associated with increased mortality. Aim of this epidemiological study is the exploration of interactions between type of treatment and strict metabolic control with respect to incident cardiovascular events. Methods: A retrospective cohort study was performed on a series of 2,283 patients (mean age: 63 years) fulfilling inclusion criteria of the ACCORD trial, except for HbA1c>7.5%. Incidence of cardiovascular disease (CVD) during a 30-month follow-up was assessed through registers of mortality and hospital admission. Results: After adjusting for age, HbA1c was not associated with increased risk in comparison with HbA1c<6% (OR 0.77 [0.33-1.80]), while patients with Hb1c>8% showed a higher incidence of CVD when compared with those in the 6-8% range (OR 1.93 [1.06- 3.52]). Among the 1,391 patients receiving insulin and/or sulfonylureas, both those with HbA1c<6% and >8% showed an increased risk for CVD in comparison with those with HbA1c between 6 and 8% (OR 3.27[1.12;9.51] and 3.14[1.42;6.95], respectively). Among patients not receiving insulin or sulfonylureas, the incidence of CVD in those with HbA1c<6% was similar to those in the 6 to 8% range. Conclusions: Near-normoglycemia could be associated with increased CVD risk only in patients receiving insulin and/or sulfonylureas. Different glycemic goals could be considered, depending on the type of pahramcological treatment prescribed.

P08.02 WINNERS AND LOSERS AT THE ROSIGLITAZONE GAMBLE. A META-ANALYTICAL APPROACH AT THE DEFINITION OF THE CARDIOVASCULAR RISK PROFILE OF ROSIGLITAZONE. L. DEL BIANCO, C. LAMANNA, F. GORI, M. MONAMI, G. MASOTTI, N. MARCHIONNI, E .MANNUCCI *(University of Florence, Geriatric Unit, Florence, Italy)*

Objectives: It has been suggested that treatment with rosiglitazone could be associated with increased risk for myocardial infarction (MI). This meta-analysis is aimed at identifying moderators of the effect of rosiglitazone on the risk of MI and chronic heart failure (CHF) in type 2 diabetic patients. Methods: RCT were included in meta-analysis if rosiglitazone was compared with other treatments (at least 4 weeks) in type 2 diabetes. The risk ratio (RR) of MI and CHF was calculated for each trial as the ratio of incidence density in rosiglitazone and comparator groups. RR, weighed for trial size, was used for regression analyses, both unadjusted and adjusted for trial duration, to explore the effect of putative moderators. Results: A total of 86 trials (26,478 and 30,215 patient*years for rosiglitazone and comparators, respectively) were included. After adjusting for trial duration, RR for MI showed a significant inverse correlation with mean baseline HbA1c, triglycerides, and LDL-cholesterol (r= -0.24, -0.45, and -0.33, respectively; all p<0.05). Conversely, rosiglitazone-associated risk of MI was increased in trials with higher mean BMI or greater proportion of insulin-treated patients (r= 0.26 and 0.42, respectively; p<0.05). Lower triglyceride levels were also associated with a higher rosiglitazone-induced risk of CHF (r=-0.23, p<0.05). Conclusions: Treatment with rosiglitazone could have divergent effects on cardiovascular risk, depending on the characteristics of the patients. Benefits could outweigh harms in patients with poor glycemic control and worse lipid profile; conversely, the drug could increase the risk of MI in obese patients, or when combined with insulin.

P08.03 ELDERLY NEWLY DIAGNOSED TYPE 2 DIABETIC PATIENTS AND SUBJECTS WITH IMPAIRED GLUCOSE TOLERANCE HAVE A HIGH PREVALENCE OF AUTONOMIC DYSFUNCTION DIAGNOSED BY SIMPLE BED-SIDE TESTS. C.H. FOSS[1], E. VESTBO[1], A. FRØLAND[2], C.E. MOGENSEN[3], E.M. DAMSGAARD[1] *(1. Geriatric Department G, Aarhus University Hospital, Aarhus, Denmark; 2. Medical Department, Fredericia Hospital, Fredericia, Denmark; 3. Medical Department M-Diabetes and Endocrinology, Aarhus University Hospital, Aarhus, Denmark)*

Objectives: Autonomic dysfunction is associated to impaired glucose tolerance (IGT) and Type 2 diabetes. We have previously shown, that autonomic neuropathy is present in 6.7 % of non-diabetic offspring of Type 2 diabetic subjects (mean age: 54 years). We wanted to estimate the prevalence of autonomic neuropathy in elderly newly diagnosed Type 2 diabetic patients and subjects with IGT. Methods: In 1990-91, we examined offspring of 385 Type 2 diabetic patients and 355 non-diabetic subjects (mean age 47 years). Seven years later a total of 374 subjects over 50 years old without previously

diagnosed diabetes or IGT were re-examined. 42 subjects had developed IGT or Type 2 diabetes. The autonomic nervous system was examined by 3 cardiovascular bed-side reflex tests assessing heart rate variation. The tests were performed and evaluated according to the procedures described by Ewing. Urinary albumin excretion rate (UAER) was measured. Mortality data will be presented. Results: The subjects were aged 50-71 years at re-examination. The prevalence of autonomic neuropathy in subjects with IGT or newly diagnosed diabetes was 26.1 % (11/42) compared to 5.4 % (18/332); (P<0.001). Subjects with autonomic neuropathy had higher levels of UAER also after adjustment for the presence of IGT or Type 2 diabetes; (P<0.05). Conclusions: Our results indicate, that it is relevant to focus on signs of autonomic neuropathy such as orthostatic hypotension even in newly diagnosed elderly Type 2 diabetic subjects.

P08.04 COGNITIVE FUNCTION OF SUBJECTS WITH TYPE 2 DIABETES MELLITUS. PRELIMINARY LONGITUDINAL DATA FROM A RANDOMIZED CLINICAL TRIAL. E. MOSSELLO, D. SIMONI, M. BONCINELLI, M. GULLO, A.M. MELLO, E. LOPILATO, C. LAMANNA, F. GORI, M.C. CAVALLINI, N. MARCHIONNI, E. MANNUCCI, M. MASOTTI *(Unit of Gerontology and Geriatric Medicine, Department of Critical Care Medicine and Surgery, University of Florence and Azienda Ospedaliero Universitaria Careggi, Florence, Italy)*

Objectives: Type 2 diabetes mellitus (T2DM) is associated with increased risk of cognitive decline among older subjects. Our aim was to identify prevalence and evolution of cognitive impairment (CI) among T2DM patients enrolled in a RCT of PPAR-gamma agonists. Methods: The sample consisted of 103 patients with T2DM enrolled in a double-blind RCT, still ongoing, aimed at evaluating the effect of rosiglitazone versus placebo on incidence of microalbuminuria. Cognitive assessment included Mini Mental State Examination (MMSE) and neuropsychological tests: Rey Auditory Verbal Learning Test (RAVLT), Digit Cancellation Test (DCT) and Trail Making Test (TMT). CI was operationally defined as a deficit in at least one of neuropsychological tests. Here we show longitudinal data of one-year follow-up, blinded to treatment status. Results: Mean age was 61±1 years, HbA1c 6.9% and MMSE score 28.0±0.2. CI was present in 34% of subjects at baseline (T0), 22% at follow-up (T1). Cognitive performance improved for RAVLT (p<0.001), DCT (p=0.016) and TMT-B (p=0.055). Subjects were classified as 'persistent CI' (13% of subjects) and 'reversible CI' (21%) according to CI status at T0 and T1. Compared with reversible CI, persistent CI was associated to lower baseline MMSE (26.4±0.6) and DCT scores and higher prevalence of microvascular complications (retinopathy, neuropathy) (p=0.002). Conclusions: A noteworthy proportion of subjects with T2DM enrolled in a RCT showed cognitive impairment. Lower MMSE score and presence of microvascular complications were associated with persistent cognitive impairment. Complete trial data will elucidate the effect of treatment on the cognitive improvement observed over time.

P08.05 AGE-RELATED STUDY OF THERAPEUTIC BENEFITS OF THE TREATMENT OF PATIENTS WITH DIABETES MELLITUS WITH HUMAN BLOOD PRECURSORS FROM UMBILICAL CORD BLOOD DIFFERENTIATED IN BETA-INSULAR PANCREATIC CELL. C.M. PENA[1], O.G. OLARU[2], R.M. PIRCALABU[1], I. RADUCANU[1] *(1. Ana Aslan National Institute of Gerontology and Geriatrics, Bucharest, Romania; 2. 'Saint Joan' Hospital - Bucur Maternity, Bucharest, Romania)*

In recent years, human umbilical cord blood (HUCB) has emerged as an attractive tool for cell-based therapy including for application in the treatment of non-hematopoietic diseases. For these reasons it is very important the potential for converting HUCB-derived stem cells into insulin-producing beta-cells. In the study, we purposed to demonstrate the potential of HUCB-derived cells to differentiate into insulin-producing cells, to investigate the characteristics of DTZ (dithizone) staining (a valuable method for the identification of differentiated pancreatic islets) of cellular clusters from HUCB and placental stem cells. Also, we purposed to evaluate several culture systems with different growth conditions for in vitro maintenance and expansion of UCB cells (CD 34+). The methodology follows these steps: HUCB collection from normal full-term deliveries, cell processing – separation procedures and preparation of leukocyte concentrates, obtaining of placental conditioned medium culture, expansion with human growth factors and counting of hematopoietic precursors, DTZ staining, subject`s selectiondependingon pathology and age, insulin detection assay in culture medium. In conclusion our study shows that the ex vivo expansion of hematopoietic progenitor cells obtained are dependent on controlled experimental conditions, which might be helpful when designing culture systems for clinical applications.

P08.06 CHARACTERISTICS OF ELDERLY DIABETIC PATIENTS ATTENDING A GERIATRIC OUTPATIENT CLINIC. S. RODRIGUEZ-JUSTO, M. NARRO-VIDAL, E. GARCIA-VILLAR, C. RODRIGUEZ-PASCUAL, A. VILCHES-MORAGA, M.T. OLCOZ-CHIVA, A. LOPEZ-SIERRA, J.M. VEGA-ANDION, M.J. LOPEZ-SANCHEZ, M. TORRENTE-CARBALLIDO, E. PAREDES-GALAN *(Complejo Universitario de Vigo, Geriatrics Department, Vigo, Spain)*

Objectives: Describe the clinical characteristics, comorbidity and glycemic control of diabetic patients attending a geriatric outpatient clinic. Methods: Prospective study including 99 consecutive elderly patients attending our outpatient clinic over a two month period. We recruited type 2 diabetic patients on pharmacological treatment, avoiding individuals with life expectancy less than 6 months, severe functional or cognitive dysfunction and those declining to enter the study. Results: A total of 99 patients with a mean age of 81.4+5.7 entered the Study. 69,8% were female, 39.5% had a Pfeiffer >3, 40% a GDS >6, and Katz score was >C in 20% of patients. 73% presented visual impairment and 42% hypoacusia. Mean Charlson comorbidity index was 4,3 and CIRS-G was 9,7. 86% had a diagnosis of hypertension, 61% dyslipidemia, 37% ischaemic heart disease, 17% a previous stroke and 36% depression. 45% developed macrovascular complications and 60% microvascular disease: Neuropathy (16.3%), Retinopathy (18.5%), established renal disease (29.6%), Macroalbuminuria (7%) and microalbuminuria (37.7%). 76% received oral hypoglycemic agents, 35% insulin and 10.5% a combination of both. ACE Inhibitors were taken by 69% and antiplatelet agents prescribed in 45.7% of diabetics. 73% and 19% of subjects received the flu and pneumococcal vaccines respectively. Glycosilated haemoglobin was adequate in 59.3% of individuals. Conclusions: Diabetic patients reviewed in our outpatient clinic are usually referred for assessment of diabetic related complications and comorbid disease. Glycemic control is suboptimal but individuals with more severe cognitive or functional disability conform better with more lenient published guidance than younger patients and stricter recommendations.

P08.07 GLYCEMIC CONTROL OF ELDERLY DIABETIC PATIENTS ATTENDING A GERIATRIC OUTPATIENT CLINIC. A. VILCHES-MORAGA *(Complejo Universitario de Vigo, Geriatrics Department, Vigo, Spain)*

Objectives: We aim to determine glycemic control of diabetic elderly patients attending a geriatric outpatient clinic while describing the differing characteristics of individuals that failed to achieve glycemic goals as recommended in published guidance. Methods: Prospective study including 99 consecutive elderly type 2 diabetic patients attending our outpatient clinic over a two month period. Patients were divided into four groups according to age/functional impairment and diabetic control determined by HbA1c and plasma glucose levels. Results:

	Diabetic control	<80yrs and FI	<80yrs and No FI	>80yrs and FI	>80yrs and No FI
Glycaemia	Adequate	40%	63%	67%	90%
	Inadequate	60%	37%	33%	10%
HbA1c	Adequate	40%	63%	40%	89.5%
	Inadequate	60%	37%	60%	10.5%
Glycaemia and HbA1c	Adequate	20%	46%	21%	78%
	Inadequate	80%	54%	79%	22%

FD: severe functional impairment

We observed a definite association between adequate plasma glucose levels, higher Charlson comorbidity scores, cognitive impairment and old age. Likewise, achievement of target HbA1c appeared related to renal dysfunction, macrovascular disease, treatment with oral hypoglycaemic agents and old age. Individuals with more severe dependency level, cognitive impairment, treatment with oral hypoglycaemic agents and older age were more likely to reach recommended HbA1c and glucose levels. Conclusions: Glycemic control of diabetic patients reviewed in our outpatient clinic is suboptimal. Individuals with more severe cognitive or functional disability, older age and higher comorbidity scores show glucose and HbA1c levels closer to target aims due to more lenient published guidance than younger patients and stricter recommendations.

P09 EDUCATION

P09.01 THE URGENT DRIVES OUT THE IMPORTANT: PROPORTION OF TRAINEE TIME SPENT IN GERIATRIC SUBSPECIALITIES AS COMPARED WITH ACUTE CARE. A. ABBAS[1], R. GRUE[1], K. ADIE[2], J. FOX[1], L. WILEMAN[1], T. PATTISON[1], S. BRIGGS[1], S. BHAT[1], P. BAKER[1] *(1. North Western Deanery, Department of Geriatric Medicine, Manchester, UK; 2. Peninsula Deanery, UK)*

Introduction: The syllabus for Geriatric Training in the UK consists of 11 core specialties.Trainees must also spend time caring for General Medical patients. Methods: The time actually spent in Geriatric Specialty Training was compared with the time spent working with acute patients for 2 Deaneries(NorthWestern and Peninsula)across 2 years. Results: The proportion of time(%)spent were for Stroke 8,Rehabilitation 7,Orthogeriatrics 4,Falls and Syncope 3,Movement Disorder 3,Continence 1,Old Age Psychiatry 1,Tissue Viability 1,Intermediate Care 1.2,Long Term Care 0.56,Palliative Care 0.4 and Acute Medicine 69. Conclusions: Despite the aim of producing Consultants with sufficient experience in any of the subspecialties,SpRs could potentially take up their first Geriatric Consultant post having spent(for example)minimal time in Intermediate Care or Long Term Care.The lion's share of training time is taken by Acute Medicine.Geriatric Medicine in the UK could be contributing to its own demise by training Consultants more experienced in Acute Medicine than their own Specialty.

P09.02 PROGRESS REPORT OF A HOME CARE MODEL FOR GERIATRIC PATIENTS: SETTING UP A SUBSTRUCTURE AND TEAM EDUCATION. N. AKDEMIR, S. SUN KAPUCU, L. ÖZDEMIR, Y. AKKUS, G. BALCI, Y. AKYAR, M. CANKURAN, M. HALIL, H KAYIHAN, M. UYANIK, O. HAZER, S. ARIOGUL *(Hacettepe University Faculty of Health Science, Ankara, Turkey)*

Objectives: The aim of the study was to develop an educational collaboration within geriatric health professionals for development of appropriate home care model for geriatric patients and to improve the quality of health care services. Methods: The study was

conducted between January 2007- January 2008, in Hacettepe University, Ankara, Turkey. The study initiated with organizing a home care team. The team members included the professionals of nurse, geriatrician, physiotherapist, social worker, home economist, and dietitian. Health professionals educated other team members biweekly about own roles, contexts, limitations in geriatric assessment, diagnosing, treatment-management, care, rehabilitation, social life and support, and home care in the first three months of the study. Members interacted with each other. Members also attended a two-week officially educational program about model development. In the following six months team members met to develop forms and educational brochures, decided scales for home care follow-up and assessment. Results: We determined the roles of team members with regard to hospital and home level and assessment scales, forms and educational brochures for an ideal home care model for geriatric patients in Turkey. The topics of forms, scales, and brochures included basic and instrumental activities of daily living, sleep, mood and cognitive function, nutrition, exercise, drug use, falls, home environment, balance, caregiver stress and burden, social support. Conclusions: This study indicates that determining the roles of team members, the requirements of substructure and working in accordance to achieve the mutual. Aims: This study is the first part of the model implementation.

P09.03 POSTGRADUATE MEDICAL EDUCATION IN PALLIATIVE CARE INCREASES CONSUMPTION OF MORPHINE HYDROCHLORIDE FOR INJECTION IN ACUTE CARE FOR ELDERS UNIT. A. CELLA, V. CURIALE, G. CUNEO, C. FRAGUGLIA, S. TRASCIATTI, E. PALUMMERI *(E.O. Ospedali Galliera, Genova, iItaly)*

Objectives: to describe the changes in the consumption of morphine hydrochloride (MHCl) for injection in Acute Care for Elders (ACE) Unit associated to postgraduate medical curriculum (second level University Master) in palliative care (PC). To compare ACE Unit with Internal Medicine Units lacking of a devoted PC physician. Methods: Time intervals (4 years): before (2004-2005) and after (2006-2007) graduation. Setting: 435-beds hospital, 20 units, including 19-bed ACE Unit. Data reviewed: MHCl consumption, patients' characteristics, length of stay, and mortality. Results: ACE Unit: 500 mg/year MHCl (1 mg/admitted patient) in 2004; 11,550 mg/year (21 mg/admitted patient) in 2007; mean age 83.6 years in 2004, 84.9 in 2007; length of stay 12 days (unchanged); mortality 12.1% in 2004, 18.2% in 2007. Internal Medicine Units: MHCl consumption 3 mg/admitted patient in 2007, mean age 72.9 in 2004, 75 in 2007, length of stay 7 days (unchanged), mortality 10.5% in 2005, 12.7% in 2007. Conclusions: Medical education in PC was associated to dramatic changes in MHCl consumption in ACE Unit. In ACE Unit patients were older and had higher mortality rate in comparison with Internal Medicine Units. Mean age and mortality rate increased in Geriatric and Internal Medicine Units. MHCl consumption was much higher in ACE Unit after PC education than in Internal Medicine Units. We can argue that postgraduate medical curriculum gave more credibility to palliative care approach in ACE Unit and increased the acknowledgement of palliative care needs of critically ill older people.

P09.04 COMPREHENSIVE UNDERGRADUATE TEACHING IN GERIATRICS: LOOKING FOR SUPPORT IN THE NATIONAL GENERIC CURRICULUM. A. BLUNDELL[1], A. GORDON[2], T. MASUD[2], J. GLADMAN[3] *(1. Sherwood Forest Hospitals NHS Foundation Trust; 2. Nottingham University Hospitals NHS Trust; 3. University of Nottingham)*

Introduction: There is currently international concern that undergraduate teaching of geriatrics is in decline. Previous research has suggested that support for geriatrics in national undergraduate curricula is key to effective delivery of teaching in the specialty. We set out to review the geriatric medicine content in the UK generic curriculum for undergraduate medicine (the General Medical Council's publication 'Tomorrow's Doctors'), in the context of international guidance about undergraduate teaching in Geriatrics. Methods: We conducted a systematic literature search, including English language curricula in geriatric medicine, and analysed Tomorrow's Doctors for content relevant to geriatric medicine. We evaluated the content of existing specialty curricula through a process of expert-judge consultation incorporating the views of national forums for scientist and physician colleagues. Those outcomes supported by this process were mapped against Tomorrow's Doctors. Results: Ten learning outcomes from Tomorrow's Doctors were identified as being relevant to geriatric medicine. Expert-judge consultation revealed general satisfaction that these outcomes were adequate in depth and scope. There was close agreement between specialty curricula from different countries. All specialty outcomes mapped to Tomorrow's Doctors. A detailed copy of the map will be presented to the conference. Discussion: Tomorrow's Doctors supports the learning outcomes outlined in specialty undergraduate curricula in geriatrics. These outcomes should therefore be delivered in all UK medical schools. This provides additional weight to calls for a comprehensive review of undergraduate teaching in geriatrics within the UK.

P09.05 AN INTERPROFESSIONAL CURRICULUM IN ELDER ABUSE FOR MEDICAL STUDENTS. A. SCLATER[1,2], V. CURRAN[2], B. KIRBY[2], J. FORRISTALL[2], D. SHARPE[2], S.A. ANSTEY[2], D. DAWE[2], S. EDWARDS[2], M. WHITE[2] *(1. Faculty of Medicine Memorial University of Newfoundland, Department of Internal Medicine, Canada; 2. Curriculum Development Team, Geriatric Care, The Inter-professional Education for Collaborative Patient-Centred Practice (IECPCP) Project Initiative, Memorial University of Newfoundland, St. John's, Newfoundland, Canada)*

Introduction: An interprofessional education module was created to introduce medical, nursing, and pharmacy students to the principles and concepts of interdisciplinary teamwork in geriatric care and elder abuse. Methods: Nursing, medicine, and pharmacy faculty identified common curriculum in geriatric medicine and integrated this into an interprofessional learning module on elder abuse. Students from nursing, medicine and pharmacy were pre-assigned to inter-professional groups to participate as interdisciplinary teams in the completion of the module. Results: The interprofessional learning experience module was comprised of a 2 hour E-learning component, followed by 2 hours of face to face learning. In E-Learning students were expected to access, complete and participate in a web-based interprofessional education tutorial in elder abuse which included review of online instructional materials and small-group discussion activity. For the face-to-face small group case based learning students met in the same pre-assigned groups as for the online discussion activity. Trained small group facilitators assisted with the process of small group learning and facilitating the team in the preparation of an interdisciplinary care plan. Students then met members of the interprofessional instructional team to address issues and questions raised during their inter-professional learning activities. Students were asked to complete an evaluation questionnaire upon completion of the module regarding the role of their own profession, as well as other professions in collaborative management of geriatric patients and elder abuse. Conclusions: Other areas of core curriculum in geriatric medicine may benefit from adaptation into interprofessional education modules for medical, nursing, and pharmacy students.

P09.06 VIEWS RELATED TO CARE OF ELDERLY PATIENTS OF NURSING STUDENTS. S.S. CELIK, S.S. KAPUCU, Y. AKKUÞ, Z. TUNA *(Hacettepe University Faculty of Health Science, Ankara, Turkey)*

Objective of the study: This study's objective is to determine views related to care of elderly patients of nursing students. Methods: This study was conducted with second class nursing students attending nursing department, Faculty of Health Science. A schedule guiding data collection was designed for use in focus group discussions. Five focus group discussions were held with 42 students. On the data collection form, there were questions about their age, the number of elderly patient students have given care, what is mean ageing according student, what are their thinks and feels and experiencing difficults while they have given care to elderly, etc. Results: According to the study results, It was found that medium age was 21 and medium elderly patient number given care was eight. The majority of the students stated that aging is lonely, desperation, dependent upon someone, poor, having cronic diseases. In addition, majority of students stated that their thinks and feels were to be tender, patient, sweety, respectful, lovable while they have given care to elderly, and experiencing difficults were patients education and relationship with elderly patients because of their mental, visual and hearing problems, and their having multiple diseases, and because of their while they have given care to elderly. Approximately half of the students wanted to give care of elderly patients after their graduation. Conclusions: We recommended to revise nursing curriculum according results of this study. The faculty, nurse and other team members should support the students while they give care elderly patients.

P09.07 COMPETENCES OF IN-JOB EDUCATOR OF PROFESSIONALS CARING FOR THE ELDERLY. K. SZCZERBINSKA[1], V. KIJOWSKA[1], E. MIREWSKA[2], R. TOPOR-MADRY[1], K. CZABANOWSKA[1] *(1. Jagiellonian University Medical College, Institute of Public Health, Cracow, Poland; 2. Pedagogical University, Cracow, Poland)*

The study was conducted in the muliticenter ComPro project (Competence Profiles for Learning Supporters in Elderly Care) funded from Leonardo da Vinici program. The main goal was to develop the self- assessment tool for a person responsible for in-job education of professionals caring for elderly people in social care institutions ('learning supporter'). Objectives: To define competence profile of 'learning supporter'. Methods: Three focus groups with managers, nurses and care assistants or other workers, persons responsible for in-job education were conducted to define competences of 'learning supporter'. Than the KodeX questionnaire was administered to them to establish the meaning of those competences. Based on the results a new questionnaire of competences was created and used to assess opinion of workers, managers and teachers in vocational schools. The factor analysis with Varimax rotation was used. Results: In the result we have created the 3 profiles of (general, personal and professional) competences expected from a 'learning supporter'. The factor analysis performed separately for the 3 groups (managers, workers, teachers) showed in each 4 factors, which have a different components with highest correlation rates. In the managers group the factor 1 correlated most with communication and organization skills; in the workers group with professional knowledge and their job specific skills; in the teachers group with personal and analytical competences. Conclusions: The analysis showed most expected skills different in each position, which can be called 'professional', 'managerial' and 'analytical'. The competence-profile assessment tool is available on ComPro website for internal assessments in social care institutions.

P10 ENDOSCOPY

P10.01 SYMPTOMATOLOGY OF ESOPHAGITIS AND PEPTIC ULCER IN ELDERLY PATIENTS: A PROSPECTIVE, MULTICENTER, ENDOSCOPIC STUDY. S. MAGGI[1], M. FRANCESCHI[1,4], A. PILOTTO[2], M. NOALE[1], G.C. PARISI[3], G. CREPALDI[1] *(1. Aging Section, National Research Council, Padova, Italy; 2. Geriatric Unit, Department of Medical Sciences, IRCCS "Casa Sollievo della Sofferenza", San Giovanni Rotondo, Italy; 3. Internal Medicine Department, General Hospital, Feltre, Italy; 4. Gastroenterology Unit, University of Parma, Italy)*

Aims: to evaluate clinical features of elderly patients with endoscopy diagnosed esophagitis (ESO) and peptic ulcer (PU). Methods: We studied 649 elderly subjects

(M=314, F=335, mean age=71.8±7.0, range=60–93 years) who underwent an upper GI endoscopy. In all patients, the UGISQUE (Upper GastroIntestinal Symptom Questionnaire for the Elderly), a validated tool that includes 15 items divided into five symptom clusters: A) abdominal pain (1.stomach ache/pain,2.hunger pain in stomach); B) reflux syndrome (3.heartburn,4.acid reflux); C) indigestion syndrome (5.nausea,6.rumbling in stomach,7.bloated stomach,8.burping); D) bleeding (9.haematemesis,10.melena); E) nonspecific symptoms (anemia, anorexia, weight loss, vomiting, dysphagia), was used. Fisher test, logistic regression and K index were used for statistical analysis. Results: At endoscopy 96 patients had esophagitis (ESO), 142 hiatus hernia without esophagitis, 28 peptic ulcer (PU), 66 erosive gastritis (EG), 151 non-erosive gastritis, 63 duodenitis, and 103 had no lesions (NL). Patients with ESO demontrated a significant association with the presence of abdominal pain (p=0.002, sensitivity=79%, specificity=41%, diagnostic accuracy=59%), reflux syndrome (p<0.0001, sensitivity=92%, specificity=46%, diagnostic accuracy=68%), and non-specific symptoms (p=0.03, sensitivity=41%, specificity=76%, diagnostic accuracy=58%). Patients with PU, demonstrated a significant association with bleeding (p=0.009, sensitivity=100%, specificity=81%, diagnostic accuracy =81%) and non-specific symptoms (p<0.0001, sensitivity=71%, specificity=76%, diagnostic accuracy =75%). Logistic regression analysis demonstrated that ESO was significantly associated with the presence of reflux syndrome symptoms (OR=9.23, 95%CI=4.1-20.9) while PU was significantly associated with the presence of non-specific symptoms (OR=7.98, 95%CI=2.9-21.9). Conclusions: Esophagitis and peptic ulcer in elderly patients demonstrate a wide pattern of symptoms, including high prevalence of non-specific symptoms and low prevalence of pain.

P11 ETHICS AND LAW

P11.01 DISCUSSING PREFERENCES FOR LONG TERM CARE OPTIONS: WHAT OLDER PEOPLE DO. R. GARAVAN[2], H. MCGEE[2], R. WINDER[2], D. O'NEILL[1] *(1. Adelaide and Meath Hospital, Dublin, Ireland; 2. Royal College of Surgeons, Dublin, Ireland)*

Context: The appropriateness and utility of living wills and advance care planning have come under increasing scrutiny, and in particular for older people. We studied the extent to which older people living in the community discuss advance care preferences with others. Methods: Structured interviews were conducted which focused on self-reported health status, experiences with health and social services, and preferences for long-term care. Participants were aged 65+ years and living in private households, randomly selected from two health administration areas (one predominantly urban and the other rural) of the Republic of Ireland, as part of the the first Irish longitudinal study on ageing. Results: A total of 2039 older people (43% male) were interviewed (67% response rate). The age and gender profile approximated that of the general population of older people in Ireland. The majority (74%) had never discussed their preferences for long-term care with their family or other trusted individuals. Respondents who were older were more likely to have discussed their preferences than younger participants, and only social support and level of functional independence were predictive of who had discussed their preferences. Conclusions: The majority of older people do not discuss preferences for long-term care with trusted others. Advance care planning for older people should be matched to the presence of likelihood for service need or support, rather than indiscriminately to whole populations. Further research is required to examine under what circumstances these discussions arise and to consider barriers and enablers to such discussions.

P11.02 QUALITY OF END-OF-LIFE POLICY: DIFFERENCES BETWEEN THE OLD AND THE YOUNG? R. PIERS, N. VAN DEN NOORTGATE, W. SCHRAUWEN, S. MAERTENS, A. VELGHE, M. PETROVIC, D. BENOIT *(Ghent University Hospital, Department of Geriatrics, Belgium)*

Objective: Dying at Intensive Care Unit (ICU) versus on non-intensive wards and frequency of Do-Not-Resuscitate (DNR) decisions are quality indicators of a hospital end-of-life (EOL) policy. The objective of this study was to compare the quality of EOL decisions in an elderly population versus a younger group of hospitalised patients. Methods: Data concerning EOL decisions were collected in all patients older than 16 years who deceased during a 12-week period in the Ghent University Hospital. Results: 52 of 165 deceased patients were 75 years or older. The Charlson comorbidity score did not differ between the elderly and the young (4.03 versus 4.43, p=0.583). Quality indicators of EOL policy are listed in table 1. No significant differences between the 2 age groups were found.

P12 EPIDEMIOLOGY

P12.01 THE IRISH LONGITUDINAL STUDY OF AGEING (TILDA). H. CRONIN, C. O'REGAN, P. KEARNEY, A. MOREIRA, Y. KAMIYA, B. WHELAN, R.A. KENNY *(Trinity College Dublin, Ireland)*

Introduction: By 2030, one in four Irish people will be 65 years or older. This unprecedented ageing phenomenon, coupled with the fact that Ireland has one of the lowest healthy life expectancies in Europe, has huge implications for society, economy and policy makers. TILDA aims to provide policy-relevant applied research that will change and greatly enhance the ageing experience for Irish people today and in the future. Key multi-disciplinary questions: 1. What changes occur in physical, psychological and cognitive function over time and across ages? 2. What are the physical, social and economic factors that condition these changes? 3. What are the adaptive responses to change and how do these contribute to successful ageing? Methods: A longitudinal design, will provide immediate and continual research output from a nationally-representative sample of approximately 10,000 people aged >50 years, followed for a minimum of 10 years. TILDA will combine a number of data-collection strategies, from face-to-face interviews to clinical examination (including collection of biomarkers) and data linkage to relevant administrative databases. TILDA's study design has evolved from and is in collaboration with other leading longitudinal studies - The Health and Retirement Study (USA), The English Longitudinal Study on Ageing and the Survey of Health and Retirement in Europe. TILDA is therefore in a unique position to capitalise on output and lessons from previous studies and facilitate ongoing international comparative research on this topic.

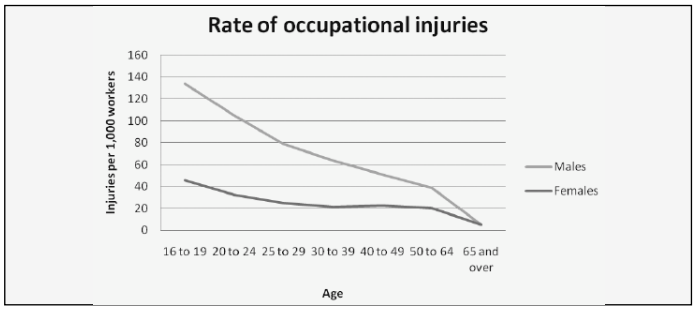
P12.02 AGE-RELATED CHANGES IN OCCUPATIONAL INJURIES. M. CARPENA-RUIZ[1], J.M. ANTON[2], P. DE ANTONIO[3], C. VERDEJO[4], A.J. CRUZ-JENTOFT[1] *(1. Hospital Universitario Ramón y Cajal, Madrid, Spain; 2. Mutualidad Fremap, Madrid, Spain; 3. Centro de Salud Colmenar Viejo, Madrid, Spain; 4. Hospital Clínico San Carlos, Madrid, Spain)*

Objectives: The type of occupational injuries may be age-related, as experience, changes in working-post profile and other factors may change along a workers life. We aimed to find which types of occupational injuries changed with age. Methods: We reviewed all reported occupational injuries in a national Spanish registry for the year 2006, which included data on worker age and type of injury. Results: 911,561 occupational injuries were reviewed for this study. Type of injury significantly changed with age (p<0.001); workers older than 65 years had a different profile even when compared only with those from 55 to 64 (p=0.0024). Bone fractures increased with age (from 6% of younger workers' injuries to 12% of older workers'), while sprains decreased. Multiple traumas were more frequent only in the oldest group. Conclusions: Older workers are more prone to suffer fractures and multiple traumas than younger workers. Sprains are reduced in this group of workers. This fact may have an impact in the organization of occupational medical services that deal with older workers.

P12.03 OCCUPATIONAL INJURIES IN OLDER WORKERS. J.M. ANTON[1], C. VERDEJO[2], P. DE ANTONIO[3], M. CARPENA[4], A.J. CRUZ-JENTOFT[4] *(1. Mutualidad Fremap, Madrid, Spain; 2. Hospital Clinico San Carlos, Madrid, Spain; 3. Centro de Salud Colmenar Viejo, Madrid, Spain; 4. Hospital Universitario Ramón y Cajal, Madrid, Spain)*

Objectives: Occupational injuries may be related with reduced abilities linked to the aging process. We aimed to determine the rates of occupational injuries in older vs. younger workers in a nationwide sample. Methods: We compiled all reported occupational injuries in a national Spanish registry for the year 2006 and compared them with the number of workers for each age group. Results: 19,747,500 workers (40.5% women) suffered 911,561 occupational injuries in 2006. Men bear a higher injury rate than women (61.6 injuries per 1,000 workers vs 23.5 per 1,000), odds ratio 2.72. In both genders, the rate of injuries was significantly lower for workers over 65 years old: in men, the rate was reduced from 39.1 for workers 50 to 65 years old to 5.5 for those older than 65 (odds ratio for injuries in older workers 0.14, 95% CI: 0.12-0.15); in women rates were 20.4 for those 50 to 65 vs. 5.2 for those older than 65(odds ratio 0.25, 95% CI: 0.22-0.29). Older workers had the lowest rates of occupational injuries of all age groups. Conclusions: Older workers have a significantly reduced risk to suffer occupational injuries than their younger counterparts. Fear of injuries should not prevent older people to continue working.

Group 15. Epidemiology



P12.04 OLDER PATIENT ADMITTED AT AN EMERGENCY SHORT STAY UNIT (ESSU) IN A SPANISH TERTIARY HOSPITAL. F.J. MARTIN SANCHEZ, C. FERNANDEZ ALONSO, J. GONZALEZ DEL CASTILLO, M. FUENTES FERRER, J. GONZALEZ ARMENGOL, P. VILLARROEL, P. GIL GREGORIO, J.M. RIBERA CASADO *(Hospital Clínico San Carlos, Geriatrics/Emergency Department, Madrid, Spain)*

Aims: To describe characteristics of older patient (>65) and to know their the main differential features(>65 year old) in relation to younger patient admitted at the ESSU of Hospital Clínico San Carlos (Madrid). Patients and Methods: retrospective analysis of all patients admitted during one year (2006). Different variables were gathered of the ESSU, Archives and Documentation Data Base. Statistical analysis with a signifance level p<0,005. SPSS 13.0. Results: n:2227. 66,6% older than 65. 58,3% women. The ten Main diagnostic-related groups (GRD): 127, 541, 142, 321, 139, 183, 88, 175, 87, 814. Principal procedures: ECG, gasometry, echography, and endoscopy. Mean length of stay was 1,65 days. 89% patients were discharged out of hospital. Older patient showed significantly (p<0,0001) higher women; higher decompensated chronic disease (acute heart failure and

COPD), respiratory infections, syncope and arrhytmias (p<0,001); lower urine infection, nephritic cholic and diarrhea (p<0,001). Diagnostic procedure needed were higher in the older group (ECG, gasometric determinations (p<0,0001) and Doppler ecography (p=0,05)) and lower abdominal ecography (p<0,0001). Length stay increases with age (1,75 v 1,35 days) (p<0,0001). At discharge: home were similar in both groups (91,0% v 87,9%), higher Home Care (19,5% v 14,9%), higher secondary hospital (11,5% v 4,8%), lower clinic review (26,5% v 31,9%) and higher other unit in-patient (11,8% v 8,4%). Conclusions: The ESSU is a high resolution clinic and diagnostic Unit. The age (>65) differentiates between clinical and management variables in a selected sample of patients admitted at an ESSU.

P12.05 RELATIONSHIP BETWEEN QUALITY OF LIFE AND MORTALITY IN THE ELDERLY. B. GRANDAL LEIROS[1], F.J. GARCIA GARCIA[1], M.R. PADILLA CLEMENTE[2], A. ALFARO ACHA[1], L.F. MORENO RAMIEZ[1], C. MORALES BALLESTEROS[3], J.M. FERNANDEZ IBANEZ[1], S. AMOR ANDRES[1], R. PAZ MAYA[1], J. FERNANDEZ SORIA[1], M. CHECA[1], A. ESCOLANTE MELICH[1] *(1. Hospital Virgen del Valle, Toledo, Spain; 2. Hospital de la Santa Creu. Girona, Spain; 3. Hospital La Mancha Centro. Alcázar de San Juan, Spain)*

Background and Objectives: There are a lot of studies that have tried to find independent predictors of mortality. The objective of our study was to investigate whether the quality of life in an elderly rural population was one of them. Subjects and Methods: We made a longitudinal study of the population, with a sample of 3215 individuals representative of the population of Toledo, aged 65 years and older. The details were obtained using a personal survey. Quality of life, physical capacity, intellectual capacity, sociodemographic and comorbidity were studied. We used multivariable logistic regression and Cox proportional hazards during the 50-month period. Results: Younger age, male sex, completion of primary studies as a minimun, married people, rural life, independence for basic and instrumental activities of daily living and neither depressed nor cognitive deficiency predicted a better quality of life. Comorbidity and smoking predicted a worst quality of life. A multivariable analysis demonstrated that quality of life was an independent predictor of mortality after making the adjustment for other known determinants of mortality. Conclusions: Quality of life was an independent predictor of mortality in our population. This relationship was not clear but, it was mediated by physical situation, depressive features, cognitive impairment and comorbidity.

P12.06 HERPES ZOSTER INFECTIONS IN HOSPITALIZED ELDERLY: ANOTHER REASON TO PROMOTE VACCINATION. P.-O. LANG, F. HERRMANN, J.-P. MICHEL *(Geneva University Hospitals Medical School, Department of Rehabilitation and Geriatrics, Geneva, Switzerland)*

Little is known about hospitalized elderly patients who may be at particularly high risk for herpes zoster infection. We studied 25 477 older patients (mean age 83.0 +- 8.4) hospitalized between 1996 and 2003. Among them, we identified 112 patients (mean age 85.5 +- 8.0) with HZ, 25% were older than 90 and 5% over 100 years of age. Women represented 67% of the geriatric hospitalized patients and 75% of the HZ patients. The incidence rate was 4.9 per 1 000 admissions in women and 3.0 in men, with an incidence rate ratio of 1.6 (p = 0.03) for women compared to men. Post herpetic neuralgia (beyond three months after the eruption) was the reason for hospitalization in 11.6% of the patients and an acute rash in 55.3%. HZ symptoms appeared during the hospital stay in 33% of the cases. Location was thoracic 46%, lumbar 17%, cervical 12%, facial 10%, ophthalmic 10% and 92% of the patients reported pain. All cases were treated with acyclovir (39%) or valacyclovir (61%) and, when pain was present, analgesics. It was possible to assess 55% of patients admitted at the acute phase of the disease and to follow them up with an observational functional tool (FIM), scoring from 18 (totally dependent) to 126 (independent). The mean score was 85.7 +- 37.9 on admission and 78.5 +- 37.6 (p < 0.0001) one week later, indicative of the high functional burden associated with HZ disease. These results indicate the strong need for prevention of HZ in hospitalized elderly.

P12.07 BURDEN OF HERPES ZOSTER IN PERSONS >50 YEARS OF AGE IN PRIMARY CARE IN SPAIN. A. CEBRIAN[1], J. DUIEZ-DOMINGO[2], M. SAN-MARTIN[3] *(1. Centro de Salud Ayora, Valencia, Spain; 2. Centro Superior de Investigacion en Salud Publica, Valencia, Spain; 3. Sanofi Pasteur MSD, Spain)*

Aims: Epidemiological surveillance is essential to understand the burden of HZ disease in Spain. This study assessed the incidence of HZ treated in primary health-care centres in Spain. We show here preliminary results. Methods: An epidemiological, prospective, population-based study was conducted between December-2006 and December-2007. A convenience sample of 24 general practitioners of primary healthcare centres included all patients' ≥14 years of age with clinical diagnosis of HZ. For those who agreed to participate, demographic and clinical data were collected. Patients were followed for a 30-day period to assess the incidence of HZ-related pain one month after diagnosis. An ongoing follow-up is assessing proportion of PHN at 3, 6 and 12 months. Results: A total of 146 were diagnosed with HZ during the study period (64% were females; mean age was 61 years [SD 17.7]). Seventy-eight percent (101/130) were ≥50 years of age, meaning an incidence of 7.0 per 1.000 persons ≥50 years. Incidence of HZ was significantly higher in the population >70 years of age (8.4 per 1.000), compared to 5.9 and 6.1 per 1.000 persons in patients 50-59 and 60-69 years, respectively. Seventy-seven percent of patients experienced pain at the time of diagnosis and pain persisted at least for one month in 28%. Persistent pain for 1 month was present in 21% and 37% of 50-59 and ≥60 years patients, respectively. Conclusions: HZ and persistent pain cause a significant clinical burden among persons older than 50 years of age, and this burden increases with increasing age.

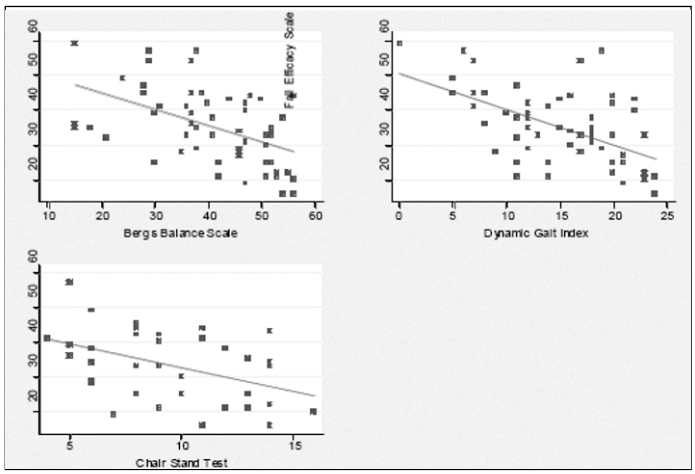
P12.08 LOMBO-SACRAL CUTANEOUS HERPES SIMPLEX VIRUS (HSV) INFECTION: EXPERIENCE IN A PALLIATIVE CARE SETTING. K. MOYNIER VANTIEGHEM[1], K. TERUMALAI[1], L. KAISER[2], L. TOUTOUS TRELLU[3] *(1. University Hospital of Geneva, Rehabilitation and Geriatrics Department, Geneva, Switzerland; 2. University Hospital of Geneva, Virology Laboratory, Geneva, Switzerland; 3. University Hospital of Geneva, Department of Dermatology, Geneva, Switzerland*

Introduction: Cutaneous herpes recurrences are less described among the old population than among the youngest one. Extragenital forms represent 21% of long term recurrences. We observed some lombo-sacral herpes infections in our debilitated patients. Objectives: To determine the prevalence of cutaneous lombo-sacral HSV in a long term care setting, analyse the epidemiological and clinical risk factors, improve the early diagnosis,and management. Methods: Every suspected herpetic lesion, was examined by a dermatologist. Samples for direct immunofluorescence (IF) and viral culture were analysed in the laboratories of dermatology and virology, respectively. Topical povidone iodine with dry dressing and oral valacyclovir treatment were initiated as soon as the clinical and/or laboratory diagnosis were confirmed. Results: During 18 months, 27 cases,10 men and 17 women, were identified (prevalence : 4.19%). The mean age was 74 years (37-93). The median survival after herpes diagnosis was 11 days. All patients had cancer and have been treated either by chemotherapy and/or radiotherapy.. 11 to 22 samples were positive on IF for HSV 2 and one for herpes zoster virus. On 15 samples cultivated, 8 were positive. 5 patients were rapidly relieved from herpetic pain but died from their cancer before the lesions had healed. Discussion: Among patients in palliative care, an early detection of cutaneous HSV is necessary. The specific management involves not only the local wound care but also the associated pain. Because of its frequent atypical aspect or association with pressure ulcers in such population, a laboratory confirmation is recommended.

P13 EXERCISE, PHYSICAL TRAINING, PHYSICAL ACTIVITY

P13.01 FALLS EFFICACY SCALE INTERNATIONAL YIELDS IMPORTANT INFORMATION ON FUNKTIONAL LEVEL IN FALL PATIENTS. M.S. BRANDT, B. JØRGENSEN, C. NYHUUS, A. LYAGER *(Geriatric Department, Aarhus University Hospital, Denmark)*

Background and Aims: The clinician needs a quick and effective tool to estimate the functional level for older patients at risk of falling. A number of tests are recommended for screening. Most of them are relatively time consuming and may need a trained physiotherapist to carry out. The aim of this study was to examine if the questionnaire Falls Efficacy Scale International (FES-I) could tell the clinician something about the older fall patients functional level. FES-I is developed to tell the clinician about how concerned the patient is about falls - low score means that the patient is less concerned. Methods: The study included 58 persons living at home admitted to the fall clinic by their GP. Mean (range) age 82 (67-92) years. 78% females. The patients were tested by Bergs Balance Scale (BBS), Dynamic Gait Index (DGI), Chair Stand Test (CST) and FES-I when they visited the fall clinic for the first time. In BBS, DGI and CST a high score mean a high functional level. Results: 26 % of the patients were close to 100 % risk of falling according to the BBS. 64 % of the patients were fairly concerned or very concerned about falls according to the FES-I scale. The linear regression models (see below) shows a significant negative linear correlation between all the three function tests and the FES-I (BBS, b=-0.46, p=.000) (DGI, b=-1.02; p=0.000) (CST, b=-1.33, p=0.006). Conclusions: The study showed a correlation between the function tests and FES-I. Thus the questionnaire about how concerned the patient is seems to be a useful tool in a fall clinic. It may also be useful for the clinicians outside a fall clinic and for the GPs.



P13.02 BALANCE TRAINING WITH VISUAL COMPUTER FEED BACK. D. HAGEDORN, E. HOLM *(Roskilde Hospital, Department of Geriatrics, Denmark)*

Objectives: We want to compare the effect of a traditional balance training program with a program that includes visual feedback as part of a computer game. The computer

games may be fun to some patients and thereby be motivating and facilitate training. Methods: Patients referred to our geriatric out patient clinic for investigation of falls go through a multifactorial assessment and intervention. Patients with impaired dynamic balance (Dynamic Gait Index below 19), are offered inclusion in this project. Patients who consent to inclusion are randomized to an intervention group receiving balance training with visual computer feedback, or to a control group receiving a traditional balance training program. The training program in both groups consists of twice weekly sessions for twelve weeks. The study is randomized but not blinded. Results: 32 patients have been included. It is our impression that the computer feedback is important and motivating for some patients. We do not have final results of effect yet. We suspect that balance training with computer feedback have a comparable effect to traditional balance training. But computer feedback may be more attractive to some. We will be able to show the final results at the Congress in September. Conclusions: It is our impression that the computer feedback makes training more fun and is well tolerated by the patients. Final conclusion on effect will be given at the congress.

P13.03 ASSESSMENT OF FUNCTION - CORE PACKAGE 'SIMPLE FUNCTION' BASED ON VALIDATED SCALES AND MEASURES. IMPLEMENTATION AND VALIDATION - DOES IT WORK IN PRACTICE ? J. LAURITSEN *(Odense University Hospital, Southern Denmark University, Institute of Public Health, Odense, Denmark)*

Introduction: Delivery of targeted exercise, physical training and mobilisation in clinical pathways for elderly patients on the boundary of hospitals and municipalities requires settled modes of priority setting, but also agreed implementation of principles and methods. Traditionally unstandardised written status documents were used rather than validated scales and indexes. The purpose of this initiative in general service work was to select a package of core indexes, independent of specific diseases, test the practical usage and develop educational material. Methods: Collaboration between three hospitals and approx 20 municipalities in Funen, Denmark. The core package covered three areas: Overall function, Self rated health, reproducible physical tests and cognitive function. Development took place in routine service work covering elderly populations over 5 years and in a dedicated before-after study of 350 consecutive rehabilitation patients, with supplementary follow-up validation. Results: Following appraisal a core final package was named “Simple Function” consisting of Barthel-20 index, EuroQol Eq-5d, Tandem Balance test, Timed Up&Go test, repeated chair stands and cognitive test (OMC). Across five municipalities and the dedicated study the package was accepted and feasible within the time constraints of day-day service. Responsiveness of indexes was demonstrated. For instruction a visual package was developed including patient interviews, test procedures and a general introduction to principles. Conclusions: Results indicate that the diagnosis independent core package for assessment of function can function in general service. The instruction material seems to fulfil the purpose of increased acceptance of structed index application as an important aspect of overall patient documentation.

P13.04 TWO YEARS FOLLOW-UP OF A REHABILITATION PROGRAMM FOR KORSAKOFF'S PATIENTS UNDER CARE INSURANCE. J.-C.LENERS, M.-P. SIBRET *(CHNP, Neuro-Psychiatric Long Term Care, Ettelbruck, Luxembourg)*

Since 2003 a two-years pilote project was initiated to compare the evolution of rehabilitation programms for Korsakoff's patients in their late sixties.This population mainly due to their age and diagnosis, is not at it's best in a nursing home. A sheltered housing community has been established and since 2007 an individualised training programm has been adopted in the small community.The comparable control groups are either in an intermediate programm of a neuro-psychiatric hospital or either in a general nursing home. Through very time-intensive, person-tailored therapies (explained in some details) the progress are documented as well as the difficulties.An external and internal evaluation team have collected datas which will be shown. The final result is a standardised community based small living group which has reached a sufficient level of autonomy to function with a minimum of professionnal help.Care insurance and hospital costs are discussed in order to compare the cost-efficiency of the programme.

P13.05 INTERRUPTIONS TO REHABILITATION IN A GERIATRIC UNIT: CAUSES AND CONSEQUENCES. M. ANGEL MAS[1], A. RENOM[1], O. VAZQUEZ[1], R. MIRALLES[1], A. BAYER[2], A.-M. CERVERA[1] *(1. Department of Geriatric Medicine, Institut Municipal d’Assistència Sanitària, Centre Forum Hospital del Mar, Barcelona, Spain; 2. Department of Geriatric Medicine, Cardiff University, Academic Centre, Llandough Hospital, Penarth, Wales, United Kingdom)*

Objectives: To determine prevalence, causes and consequences of interruption of rehabilitation (IR) in patients admitted to a Geriatric Rehabilitation Unit. Methods: A prospective cohort study of 300 consecutive admissions to a geriatric unit for assessment and rehabilitation over 10 months was conducted. IR was defined as interruption of the standard rehabilitation programme of >3 days consecutively because of medical, cognitive or mood disturbance. Factors that might relate to interruption were identified from comprehensive geriatric assessment at time of admission. Outcomes in terms of efficiency (Barthel Index gain per day) and discharge destination were analyzed. Results: IR was present in 54 (22%) of 247 patients starting the programme. The main causes of interruption were acute infection (35%), acute worsening of chronic disease (22%) and confusion (18%). Whereas measures of co-morbidity, cognition or mood at time of admission were not related with IR, presence of incontinence or pressure ulcers were related factors. Despite similar length of stay and total days of rehabilitation, efficiency in the IR group and non-IR group was 0.1 ± 0.9 and 0.8 ± 0.7($p<0.001$) respectively. Only 24% of IR patients were discharged to their own home, compared to 82% of non-IR patients ($p<0.001$). Conclusions: IR is frequent in inpatients admitted for rehabilitation and related with poor efficiency and less frequent discharge home. Patients with incontinence or pressure ulcers at time of admission were more likely to have rehabilitation interrupted and may benefit from closer review before and during rehabilitation.

P13.06 WII-HABILITATION? A. MATHUR, S. LORD *(University Hospitals Birmingham Foundation NHS Trust, Department of Medicine, Birmingham, UK)*

Objectives: Does the Nintendo Wii have a role in rehabilitation of the elderly? Background: Benefits of physical activity in the elderly include increased muscle strength, decreased joint stiffness and falls, and improved co-ordination and mood. Traditional methods to promote physical activity in this age group can be limited by lack of motivation or poor compliance, which can prevent them from reaching maximum rehabilitation potential. The Nintendo Wii is a new generation computer game which reacts to body motion by tracking spatial movement, with the player’s precise movements being detected and performed by their computer character. Its reported benefits are improved co-ordination and balance. An unexpected but apparently enthusiastic group of consumers have turned out to be residents of residential care homes in parts of the UK. Staff at such homes have reported that these games are getting the elderly on their feet and promoting their physical health. Methods: We reviewed material including journal publications, printed media and Internet reports. We also collated anecdotal evidence from residential home participants and the manufacturer’s website. Conclusions: Our review of available material revealed the Wii to be immensely popular in residential homes. The highlighted benefits are achieving improved physical activity through an entertaining and interactive medium, thus increasing compliance and motivation. However, there have been no scientific trials assessing the benefit of the gaming console in the rehabilitation of the elderly. We conclude that there is a potential for the use of such new generation computer games in these patients and recommend further research.

P13.07 PHYSICAL ACTIVITY IN MIDDLE-AGED MEN AS A PART OF GERIATRIC PREVENTION. Z. MIKES[1], P. MIKES[2], J. HOLCIKOVA[1], A. DUKAT[3], J. LIETAVA[3], J. PETROVICOVA[3], V. STRELKOVA[3], J. KOLESAR[3] *(1. 1st. Department of Geriatrics, Comenius Univ.Faculty of Medicine, Bratislava, Slovak Republic; 2. 1st. Department of Internal Medicine, Comenius Univ. Faculty of Medicine, Bratislava,Slovak Republic; 3. 2nd Department of Internal Medicine, Comenius Univ. Faculty of Medicine, Bratislava, Slovak Republic)*

Objectives: Physical exercise is considered to be an important part of cardiovascular prevention. With respect to the high cardiovascular mortality of men in Slovakia,we examined the physical activity and cardiovascular risk factors in a sample of men in the region of Bratislava and influence on their prognosis during 15-year follow-up. Methods: 2000 healthy men aged 40-55 years were enrolled.The examination included history,leisure time activity,cardiovascular risk factors analysis and physical working capacity(PWC) estimation by bicycle ergometry. Results: at baseline the PWC was lower in smokers than non-smokers. The overall physical activity of the group was very low(median of heavy physical activity equal zero). After 15-years follow-up,the cardiovascular and overall mortality significantly increased with age,systolic blood pressure,obesity,smoking habit and resting heart rate. Negative correlation was found between heavy physical leisure time activity and mortality. Conclusions: Authors conclude, intensive physical activity in middle-aged men enables to reach the senescence in better health condition and could be considered as an important part of geriatric prevention.

P13.08 INTRA- AND INTERRATER RELIABILITY OF THE DYNAMIC GAIT INDEX IN OLDER ADULTS WITH BALANCE IMPAIRMENTS. L. ROKKEDAL, P. GRANBERG, R. SYLVEST MORTENSEN *(Glostrup Hospital, Division of Physiotherapy, Denmark)*

Objectives: The Dynamic Gait Index (DGI) is used in several fall prevention clinics in Denmark. For this reason it was translated into Danish in 2007. The purpose of this study was to examine the intra- and interrater reliability of the Danish DGI translation, in a population of older adults with balance impairments. Methods: A total of 48 older adults (mean age: 76,8 - 79,4 years) with balance impairment were included in this study. Twenty-four of the subjects were admitted to a hospital and the last 24 subjects were community-dwelling older adults refereed to physiotherapy in a local rehabilitation center. The participants carried out the DGI two times with 1½ hour apart. Each subject was rated by 3 Physiotherapists in the first attempt and only by the intrarater in the last attempt. The intraClass Correlations Coefficient (ICC, 2.1) were used to analyze the intra- and interrater reliability for the total DGI scores and items DGI scores. Results: In the hospital the intrarater reliability for total DGI scores was 0,898 and the interrater reliability for total DGI scores was 0,924. In the local rehabilitation center the intrarater reliability for total DGI scores was 0,894 and the interrater reliability for total DGI scores was 0,824. Conclusions: The reliability of the DGI is acceptable in both hospitalized and community-dwelling older adult with balance impairment and can be used as a valid instrument for evaluating dynamic balance.

P13.09 INFLUENCE OF DEDICATED WARD BASED THERAPISTS IN A GENERAL REHABILITATION WARD ON PATIENT OUTCOME. K. SHIPMAN, B. VINCENT, T. PATEL, C. YAU *(Stoke Mandivelle Hospital, Aylesbury, UK)*

Objectives: There is outcome data for ward based Stroke and Orthogeriatric rehabilitation. How ever there is no such data for a general geriatric rehabilitation ward.

This study was done to compare the influence of dedicated ward based physiotherapy and occupational therapy provision with that of an undedicated / adhoc service provision, on patient outcome in a general rehabilitation ward. Methodology: • Retrospective data analysis over a period of 9 months in a 20 bedded general geriatric rehabilitation ward in a district general hospital. • Initial 6 months (April 2007 till September 2007) with undedicated therapy service and the last 3 months (October 2007 till December 2007) with dedicated ward based therapists. • Data collected were date of admission, date of discharge, length of stay, discharge destinations and number of therapy treatment sessions. Results: • Total sample size – 345; • P value for length of stay = 0.0089

	Undedicated /Adhoc N=235	Dedicated N=110
Length of Stay (days)	18	15.25
Average number of physiotherapy visits to the ward per month	216	274
Number of 15 minutes sessions	407	569
Discharge to destinations other than home.	25.9%	21.8%

Conclusion: 1) Provision of dedicated ward based therapists reduces the length of hospital stay for patients by 2.75 days and increases the number of discharges to home environment. 2) It also increases the amount of treatment sessions provided by 40%. 3) As dedicated therapists are part of national standard it is important that this service gets implemented at national level.

P13.10 THE TRAFFIC LIGHT SYSTEM AS A TOOL IN ELDERLY REHABILITATION. R. REHMAN, A. SALAM, S. BALLENTYNE *(Good Hope Hospital, Birmingham, United Kingdom)*

Introduction: At a tertiary elderly rehabilitation facility in Birmingham, UK, the traffic light system has been recently implemented to improve awareness of patient's functional status. The colours code as following: Red - mobile with assistance of two, Amber - mobile with assistance of one, Green - independently mobile with the assessment made by a fully qualified physiotherapist. Objectives: We assessed whether patients found this system helpful, motivating and whether there were any specific problems encountered. Methods: All inpatients (n=29) were interviewed using a questionnaire. Results: The average age was 81. 66% of patients were happy with the pace of their rehabilitation. 83% were interested in improving mobility. Currently 14% were on a Red labels, 45% on Amber and 41% on green. 66% were aware of what the traffic light system meant with 90% finding it useful. 88% were keen to proceed to green. 100% were keen to proceed to at least amber from red. 69% felt they would let themselves down going down a colour. 93% were happy with their equipment being labelled. Conclusions: The traffic light system is successful in improving motivation and promoting patient safety on the wards. Most patients found it helpful and felt it "gave them control" and a "target to aim for". Specific problems included nursing staffing issues for its implementation and issues regarding non compliance. We feel its application should be considered in larger units and more work can be done to maximise the motivational stimulus the traffic light system brings to elderly rehabilitation.

P14 FALLS, FRACTURES AND TRAUMA

P14.01 DISCHARGE MEDICATIONS IN ELDERLY PATIENTS ADMITTED WITH FALLS - POLYPHARMACY IS STILL A MAJOR PROBLEM. D. AW, N. WEERASURIYA, S. LEE, T. MASUD *(Department of Health Care of the Older Person, Queen's Medical Centre, Nottingham, UK)*

Introduction: Polypharmacy is a risk factor for falls, particularly psychotropic and anti-arrhythmic drugs. NICE guidelines suggest that psychotropic drugs and more than 4 medications increase risk of recurrent falls. We looked at patients admitted with falls who were discharged on more than 4 medications and what type of medications they were discharged on. Methods: Discharge data was collected retrospectively for all the patients discharged from geriatric wards in the month of October 2007. All patients who were admitted with a fall as stated in their discharge summary were included. Results: 178 discharge letters were available (75% of discharges). 40% of patients were fallers who were grouped as those discharged on < 5 medications and ≥ 5. 65.3% were discharged with ≥ 5 medications. Drugs such as antipsychotics, antidepressants, sedatives and antiarrhythmics had been prescribed in both groups. Conclusion: A large proportion of falls patients are still being discharged with multiple medications. These medications are the same in both groups. Moreover, common drugs known to cause falls in elderly patients are still being prescribed at discharge. The drugs more significantly prescribed are antidepressants and antihypertensives. A risk versus benefit medication analysis should always be performed in all patients admitted with falls.

Table 1

Top 5 Drugs	< 5	MPR*	≥5	MPR*
Analgesics	17	0.68	49	1.04
Osteoporotic medications	11	0.44	43	0.91
Antihypertensives	5	0.20	40	0.85
Laxatives	7	0.28	39	0.83
Antiplatelets	8	0.32	33	0.70

Table 2

Drug type	< 5	MPR*	≥ 5	MPR*
Antipsychotics	3	0.12	8	0.17
Antidepressants	1	0.04	12	0.26
Sedatives	2	0.08	3	0.06
Antiarrhythmics	2	0.08	2	0.04
Antihypertensives	5	0.20	40	0.85
Antiepileptics	1	0.04	3	0.06

* Medications to person ratio

P14.02 PRESENTATION OF FALLS TO THE EMERGENCY DEPARTMENT IN 3 IRISH TEACHING HOSPITALS; A COMPARISON OF AGE RELATED FACTORS AND OUTCOMES. P. BARRY[1], M. O'CONNOR[1], F. O'SULLIVAN[1], E. MORIARTY[2], K. O'CONNOR[3], M. O'CONNOR[1] *(1. Cork Univeristy Hospital, Department of Geriatric Medicine, Ireland; 2. Department of Physiotherapy, PCCC Cork, Ireland; 3. Mercy and South Infirmary University Hospitals, Cork, Ireland)*

Introduction: Falls and fractures are a major cause of disability and mortality for older people and there is a belief that older people are more likely to inappropriately utilise acute services for many conditions including falls. There is no published data from Ireland identifying rates of presentation to acute services of different age groups who fall. Objectives: To compare rates of presentation with falls in the older vs younger age group To identify causes and outcomes in those subjects presenting with falls. Methods: Details of all patients presenting to the ED of 3 city teaching hospitals over a one week period were reviewed. Detailed information on all subjects who fell was obtained. Mechanisms of fall, injuries and utilisation of services were reviewed. Results: 1696 subjects attended the three EDs. Falls accounted for 15.5% of presentations. Although most falls (65.6%) of falls occurred in the under 65 year group, subjects over 65 were more than twice as likely to present with a fall (28.7% vs 14.8%, Odds Ratio 2.3 CI: 1.7-3.1, p<0.001). 37% of all falls were associated with a fracture and this was more common in older people. Older subjects were twice as likely to require hospital admission compared to younger subjects (Odds Ratio 2.7, CI: 1.4-5.4, p<0.001). Conclusions: Older people do not represent the majority of presentations with falls to the ED. However subjects over 65 years were more than twice as likely to both present with a fall, and to require admission for investigation and treatment.

P14.03 THE NEED FOR A PRACTICE TRIAL WHEN USING THE TIMED 'UP & GO'-TEST IN HIP FRACTURE PATIENTS. B. BOGEN[1], J.M. BJORDAL[2], M. TANGE KRISTENSEN[3], R. MOE-NILSSEN[4] *(1. Haraldsplass Deaconal Hospital, Department of Occupational Therapy and Physio, Bergen, Norway; 2. Bachelor of Physiotherapy Programme, Bergen University College, Bergen, Norway; 3. Lund University, Sweden and Department of Physiotherapy and Orthopaedic Surgery; Hvidovre University Hospital, Denmark; 4. Section for Physiotherapy Science, Faculty of Medicine, University of Bergen; Bergen, Norway)*

Objectives: The developers of the Timed "Up & Go"-test (TUG) stated that persons to be tested should be allowed a practice trial before the actual, timed trial, but some users time the practice trial. The purpose of this study therefore was to investigate the variation between the practice trial and the timed trial in hip fracture patients. Methods: A total of 62 patients (43 women (69%) and 19 men (31%)) with a mean (SD) age of 78.5 (7.7) years were included. Patients: those under 60 years of age, admitted from nursing home, with severe cognitive dysfunction or in need of extensive medical care, were not included. All patients performed the TUG twice in one session upon discharge from hospital. Results: The mean (SD) time for the first trial was 35.8 (15.4) seconds, for the second trial it was 31.1 (14.2) seconds. 77% of the patients completed the TUG faster on the second trial. Overall, patients performed the second trial faster (p=0.06, paired t-test). Relative reliability was ICC (1,1) .89 / ICC (3,1) .94. 95% CI for one measurement was ±9.9 seconds and 95% CI for difference between repeated measurements was 14.0 seconds. Conclusions: Relative reliability appears to be adequate, but there is considerable measurement error, of which a learning effect seems to be a greater source than exhaustion. This emphasizes the need for a practice trial. Further research is needed to see if more trials are needed for optimal reliability.

P14.04 ALCOHOL AND FALLS IN OLDER PEOPLE: A SYSTEMATIC REVIEW. I. CROME[2], F. LALLY[3], P. CROME[1] *(1. Keele University Medical School (Courtyard Annexe), Keele, UK; 2. Keele University Medical School (Harplands Campus), Keele, UK; 3. Keele University Medical School, Keele, UK)*

Objectives: Falls are a significant cause of injury, morbidity and mortality in older people. Recognised risk factors include frailty and prescription medications. The risks associated with alcohol consumption have not been well studied. We reviewed the relevant publications to determine if the evidence substantiated a relationship between alcohol consumption and falls in older people. Methods: The literature review was undertaken between November 2006 and March 2007. We systematically searched the following databases: PubMed, MEDLINE, EMBASE, the Cochrane Database of Systematic Reviews, and the Cochrane Central Register of Controlled Trials. General internet searches were also made. The abstracts of 172 potential papers were read to identify those relevant to falls and alcohol in older people. Descriptive studies were excluded. 20 studies, which met the inclusion criteria, were analysed. Sample size ranged between 75-32,382 in a

variety of hospital and community settings throughout Europe and North America. Results: The majority of studies (15) were cross sectional. Study methodologies in assessment of alcohol use varied: 14 were self-report, 3 utilised blood alcohol, and 3 extracted information from patient records. There was a positive association in 11 studies, of which 5 were statistically significant. 1 study demonstrated a statistically significant negative association, while 2 studies reported a non-significant protective effect; there was a possible association in 6. Conclusions: The differences in methodology, sample size, and settings make comparisons and definitive conclusions difficult. The apparent trend towards a relationship between falls and alcohol requires further investigation.

P14.05 OPIOIDS FOR FRAGILITY VERTEBRAL FRACTURES IN ACUTE CARE FOR ELDERS UNIT: A CASE SERIES. V. CURIALE, R. CUSTURERI, C. PRETE, S. TRASCIATTI, E.O. OSPEDALI GALLIERA *(Genova, Italy)*

Objectives: to observe the impact of opioids on patients' outcomes. Methods: We reviewed 17 consecutive patients admitted to Acute Care for Elders (ACE) Unit for recent fragility vertebral fractures over a 2-year period. We recorded age, sex, length of stay, provenance, multimorbidity, involved vertebrae, neurological sequelae, surgery and orthosis, analgesic drugs administered, side effects, and patients' variables on admission to and discharge from the ACE unit (functional status, self-sufficiency, living arrangement, pain intensity). Results: (absolute and median values). Age 83 (15 women, 2 men), all home-living, 7 admitted to the emergency room, hospital stay 19 days, severity and comorbidity indexes (13-item Cumulative Illness Rating Scale) 1.69 and 2, 11 had lumbar fractures and no neurological sequelae observed. On admission 14 patients were severely in pain, self sufficiency was preserved on Barthel (93/100) and Katz (5/6) indexes but was lost on Lawton (3/8), 11 were able to walk without help of others, 10 received step II analgesics on WHO ladder (tramadol, mean daily dose 208 mg/day) and 5 received step III drugs (54 mg oral morphine equivalents), 1 underwent vertebroplasty, and 6 used orthosis. 1 patient discontinued tramadol for delirium. On discharge 16 had reach pain control (absent or mild pain), self sufficiency was unchanged, the ability to transfer themselves slightly improved, 4 were admitted to nursing home for post-acute care. Conclusions: opioids safely and adequately controlled pain and functional decline associated with recent fragility vertebral fractures in ACE Unit.

P14.06 FALLS RISK FACTOR ANALYSIS: WHICH REGRESSION TECHNIQUES TO USE? F. HERRMANN, N. PETITPIERRE, J.-P. MICHEL *(University Hospitals of Geneva, Department of Rehabilitation and Geriatrics, Switzerland)*

Objectives: To describe how to analyze risk factor associated with falls. Methods: A review of the different statistical models available will be presented and illustrated with data from a 10 year falls register. Model selection is based on the type of the outcome variables: logistic regression is used to discriminate fallers from non fallers and ordered logistic regression to distinguish among tree groups (non faller, faller and recurrent fallers). Poisson and negative binomial regressions are useful to determine risk factors associated with the number of events observed during an admission whereas Cox proportional hazards regression is used to determine the occurrence of time dependant outcomes (when the patient will fall). Results: Results from the analysis are illustrated with data from a systematic data collection of falls occurring in our 298 beds acute and rehabilitation teaching geriatric hospital. Over a period of 10 year 4801 falls were observed during 24787 admissions of 13949 patients. The risk associated with age and gender will be expressed as odds ratio, incidence rate ratio and hazards ratio. In addition a Medline review of the 3740 papers indexed with the keywords 'Falls risk factor' shows that 382 (10.2%) of the published papers applied logistic regression techniques and only 40 (1.1%) Cox models, the other type of models being rarely used. Conclusions: The choice of the most appropriate statistical model depend on the type of the outcome variable, which itself is determined by the research question, the study design and the data available.

P14.07 ASSESSMENT OF THE AUTONOMIC FUNCTIONS IN GERIATRIC PATIENTS WITH PREVIOUS FALL. M. ISIK, M. HALIL, A. DENIZ, B.B. YAVUZ, Z. ÜLGER, M. CANKURTARAN, B. YAVUZ, K. AYTEMIR, S. ARIOGUL *(Hacettepe University, Faculty of Medicine, Ankara, Turkey)*

Objectives: Falls are among the most common and serious problems facing the elderly. There are many well known factors related with falls but autonomic functions in geriatric patients with a fall history have not been sufficiently studied. The aim of this study was to determine autonomic functions with heart rate variability (HRV) and QT dynamicity (QTD). Methods: All patients underwent a complete and comprehensive geriatric assessment. They were questioned for fall history within one year preceding the outpatient clinic visit. Thirty-three subjects with fall history and 31 controls matched for demographic characteristics and laboratory parameters were enrolled. All patients underwent the Tinetti-Poma test to assess gait and balance and all had transthorasic-echocardiography, electrocardiogram (ECG) and HRV analysis using 24-hour ECG monitoring. Results: Statistically significant alterations were determined in some of time domain parameters of HRV and QTD. There were no significant difference in frequency domain parameters. Conclusions: This study showed autonomic dysfunction in patients with fall history. Determination of autonomic functions with non-invasive methods in geriatric patients with a fall history will be beneficial to prevent recurrent falls.

P14.08 BALANCE AND FALL IN HEALTHY OLDER PEOPLE. W. KITISOMPRAYOONKUL[1], D. CHAIWANICHSIRI[1] *(Faculty of Medicine, King Chulalongkorn Memorial Hospital, Chulalongkorn University, Bangkok, Thailand)*

Objectives: To compare balance between faller and nonfaller in healthy older people. Methods: Two hundred twelve healthy people aged 60-80 years participated in a cross-sectional study. Medical status and history of fall in the previous 6 months were recorded. Balance was assessed using the timed single leg stance (SLS), the Get-up and Go (GUG) test, the Timed Up & Go (TUG) test and the Expanded Timed Get-up-and-Go (ETGUG) test. The results were compared between faller and nonfaller. Results: Forty-five elderly (21.2%) were faller. All of them were independence mobility. Mean age (SD) of faller and nonfaller were 69.7 (4.97) and 68.4 (5.58) years, respectively ($p = 0.141$). Female fell more frequent than male (29.5% vs. 13.1%, $p = 0.003$). Score 2 of balance function scale (very slightly abnormal) from GUG test was significantly found in faller more than nonfaller (60% vs. 42%, $p = 0.035$). TUG and ETGUG of faller were greater than nonfaller, timed SLS and walking speed of faller were lesser than nonfaller, without statistical significance ($p > 0.05$). ROC area under curve of various balance testes in this study were 0.413-0.589. The ROC area under curve of GUG test was 0.589. Conclusions: Fall in healthy older people is related with female gender and abnormal balance. Brief screening with balance observation using the Get-up and Go test has highest discriminated ability among various balance testes in healthy older people.

P14.09 KNEE-EXTENSION STRENGTH, POSTURAL CONTROL AND FUNCTION ARE RELATED TO FRACTURE TYPE AND UPPER-LEG EDEMA IN PATIENTS WITH A HIP FRACTURE. M. TANGE KRISTENSEN[1], T. BANDHOLM[2], J. BENCKE[2], C. EKDAHL[3], H. KEHLET[4] *(1. Department of Physiotherapy and Orthopaedic surgery, Hvidovre University Hospital, Denmark and Lund University, Department of Health Sciences, Division of Physiotherapy, Sweden; 2. Gait Analysis Laboratory, Department of Orthopaedic Surgery, Hvidovre University Hospital, Denmark; 3. Lund University, Department of Health Sciences, Division of Physiotherapy, Sweden; 4. Section of Surgical Pathophysiology, Rigshospitalet, Copenhagen University, Denmark)*

Objectives: In patients with a hip fracture, postoperative edema and strength reduction are common problems in the fractured leg. The purpose of this study was to examine the influence of fracture type and postoperative edema on physical performances in patients with a hip fracture. Methods: Twenty patients at a mean (SD) age of 77 (7) years; 15 women and 5 men, admitted from their own home to an acute orthopaedic hip fracture unit, were included. Ten had cervical and ten had intertrochanteric fractures. Correlations between fracture type and upper-leg edema (% non-fractured) in the fractured leg to physical performances of basic mobility evaluated by the Cumulated Ambulation Score (CAS), postural control measured on a biomechanical force plate, and isometric knee-extension strength were examined. All measures, except those of basic mobility, were conducted at time of discharge (postoperative day 8.5 [2.9]). Results: Patients with intertrochanteric fractures had larger edema (111 % non-fractured leg) compared with cervical fractures (104 % non-fractured, $p < .001$). Leg edema was significantly correlated with scores of basic mobility ($r = -.61$, $p = .004$), postural control ($r = .67$, $p = .001$) and fractured leg knee-extension strength ([% non- fractured], $r = -.77$, $p < .001$), describing between 32 and 59% of the variance (R2) in performances. Conclusions: Fracture type and the corresponding upper-leg edema are important factors influencing physical performances after hip fracture. These findings have important implications for rehabilitation programs and for further research in patients with a hip fracture.

P14.10 ALGORITHMIC REFERRAL (ARR) TO A GERIATRIC FALLS CLINIC (GFC) AFTER FALL RELATED VISITS TO AN EMERGENCY DEPARTMENT (ED) – ACCEPTANCE FROM PATIENTS (P) AND STAFF. J. LAURITSEN[1], G.V. SØRENSEN[2] *(1. Odense University Hospital, Ortopedic Department, Odense, Denmark; 2. Odense University Hospital, Geriatric Department, Odense, Denmark)*

Introduction: A recommendation from the Danish Board of Health suggests structured referral based on assessment of fall risk for all P in ages 65+ with at least one positive out of four key questions (repeated falls, daily balance problems, dizziness, unconsciousness related to the fall). This paper documents completeness of implementation in routine service. Methods: Setting: Denmark, Odense, one ED. Immediate catchment area population approx 40000. Falls defined by coded cause of contact and/or P history. The treatment nurse was supposed to fill out a structured interview form. With at least one affirmative answer and patient acceptance referral was made to the GFC. Data completeness based on electronic patient registry for all visits after falls and collected forms was assessed. Data were available for a period of 10 months. 95% Confidence Intervals used. Each patient included at first visit. Results: 2537 fall related visits were made by 2367 P, but only 679 patients had a form completed (29% CI 27-30). Among the 487 meeting the criteria 313 accepted referral (65% CI 60-68). Additional 6 P were referred due to logistics errors. Conclusions: Results indicate that the organizational effort of introducing the ARR has been insufficient. Implementation was effective for about one third of patients. Further efforts must be made to persuade the ED staff to use time on information collection for a "non-immediate treatment purpose". Analysis of actual preventive effect of ARR and the following geriatric risk assessment and intervention cannot be made with current incomplete and possibly biased referral.

P14.11 CLINICAL TESTS AND COMMON DAY ACTIVITIES ASSESSMENT IN THE EVALUATION OF ELDERLY FALLERS. A. GONZALEZ, M. LAZARO, E. GONZALEZ, J. M. RIBERA *(Hospital Clínico San Carlos, Madrid, Spain)*

Background and Aims: Falls are a main problem among elderly people due to the high risk of injuries, incapacity and even death that involves. Our study evaluates the role of clinical tests and common day activities assessment by posturography (Neurocom Balance Master) in patients with recurrent falls in order to find early predictors for future risk of falling. Methods: case-control study concerning 226 subjects older than 65 years (2 groups

of 113 subjects each according the existence [A] or no [B] to falling incidents during the last 6 months). Clinical Tests: Timed up and go (TUG), Tinetti Performance Oriented Mobility Assessment (POMA). Balance Master Tests: Walk Across (WA), Sit To Stand (STS), Step Up Over (SUO). Statistical analysis SPSS 12.0. Results: Clinical Test (global p<0,001): TUG >20 seconds A: 51,3%; B: 2,7%. POMA <18 points A: 38,9%; B: 3,5%. Balance Master Tests: WA (<39 cm/sec) A:71,4%; B:28,4% (p<0,001). STS transfer time (seconds): A:1.82(0.93-3.73) B:0.93(0.49-4.31) (p<0,001). SUO (% of body weight, standard deviation): Left lift-up index A:12.90(±6.03); B:15.57(±6.72) (p=0,011). Right lift-up index A:14.91(±7.44); B:17.85(±7.08) (p=0,019). Conclusions: Patients with recurrent falls present a slower velocity and worse score on TUG and POMA tests. They also show a slower movement sequence going from sitting position to bipedestation. We observe as well among elderly fallers less limb pressure used on movements during SUO test performance. These posturographic tests that reproduce daily life physical conditions have a certain role in the early assessment of gait problems and the risk of falling.

P14.12 POSTURAL STABILITY IN THE ELDERLY: A COMPARISON BETWEEN FALLERS AND NON FALLERS. M. LÁZARO, A. GONZÁLEZ, E. GONZÁLEZ, J.M. RIBERA CASADO *(Hospital Clínico San Carlos, Madrid, Spain)*

Background and Aims: a poor postural stability in older people is associated with an increased risk of falling. Detecting disturbances that affect both posture and gait is a main concern in common assessment of fallers. Our study investigated the utility of instrumental evaluation by use of Neurocom Balance Master in the global assessment of elderly people with gait problems and risk of falling. Methods: case-control study concerning 226 subjects older than 65 years (2 groups of 113 subjects each according the existence [A] or no [B] to falling incidents during the last 6 months). Balance Master Tests: Modified Clinical Test for the Sensory Interaction on Balance (mCTSIB), Rhythmic Weight Shift (RWS). Statistical analysis SPSS 12.0. Results: mCTSIB mean results [degrees/sec]: Firm surface, eyes open: A: 0.4(0.3-0.5); B: 0.4(0.3-0.5) [p=0.065]; Firm surface, eyes closed: A: 0.5(0.4-0.7); B: 0.4(0.3-0.6) [p=0.032]; Foam surface, eyes open: A: 1.4(1.0-2.6); B: 0.9(0.7-1.3) [p<0.001]; Foam surface, eyes closed: A: 3.7(2.0-6.0) B: 2.0(1.3-3.4); [p=0.001]. RWS: Center of Gravity Velocity (degrees/sec): no statistical differences. Directional Control Forward-backward slow velocity: A 46 (30-60); B 56 (46-71) [p=0,54]; moderate velocity: A: 48 (32-62); B: 57 (43-74) [p=0,06]; fast velocity: A: 55 (35-69); B: 59 (44-68) [p=0,004] (right-left velocity: no statistical differences). Conclusions: Posturographic evaluation by the mCTSIB (foam surface condition) and RWS (directional control on fast forward-backward movements), appears to be a sensitive tool to identify elderly people at high risk of falls.

P14.13 USING A COMPREHENSIVE GERIATRIC ASSESSMENT IN 'COLLAPSE QUERY CAUSE' PATIENTS. S. GILLETT, M. MAC MAHON *(Department of Elderly Medicine, Bristol Royal Infirmary, Bristol, United Kingdom)*

Introduction: The term 'Collapse query Cause' is commonly used to describe patients admitted to hospital with unexplained collapses in the UK. It is often assumed that many of these patients have experienced syncope and they are often referred immediately for specialist cardiovascular tests by acute Medical Admission Units that do not routinely use comprehensive geriatric assessment (CGA) tools. Objectives: To attribute diagnoses to collapse episodes amongst elderly admissions using a CGA. Methodology; We prospectively assessed 40 'Collapse query Cause' patients referred to our specialist elderly medical ward using our CGA protocol noting various clinical data and using validated falls risks and balance assessments. Results: Mean age 83yrs, 63% female. The collapses were attributed to falls/abnormal balance and gait in 63%, acute medical conditions in 27% (sepsis 25%, acute coronary syndrome in 2%) and, syncope in 10% respectively. 90% had ≥2 risk factors for falls and 75% had risk factors predictive for serious injury. 65% had collapse-related admissions within the previous year. Folstein MMSE <24 in 60% (25% <17). Conclusions: The majority of 'collapses' were attributed to accidental falls in patients at risk of serious injury. Syncope comprised a small proportion overall. The CGA in an area dedicated to elderly medical care enabled us to select appropriate management plans including cognitive assessment, relevant medical investigations, falls and fracture prevention as well as additional support upon discharge. The CGA offers useful information that could be employed in all adult acute medical admission units and that may also obviate inappropriate investigations.

P14.14 A COMPREHENSIVE HIP FRACTURE PROGRAM REDUCES COMPLICATION RATE AND MORTALITY. S. JUHL PEDERSEN[1], F.M. BORGBJERG[2], B. SCHOUSBOE[2], B.D. PEDERSEN[2], H.L. JØRGENSEN[3], B.R. DUUS[1], J.B. LAURITZEN[1] *(1. Department of Orthopaedics, Bispebjerg University Hospital, Copenhagen, Denmark; 2. Department of Anaesthesiology, Bispebjerg University Hospital, Copenhagen, Denmark; 3. Department of Clinical Biochemistry, Bispebjerg University Hospital, Copenhagen, Denmark)*

Objectives: The aim of this study was to evaluate the rate of postoperative complications, length of stay and 1- year mortality before and after introduction of a comprehensive multidisciplinary fast track treatment and care program for hip fracture patients. Methods: The fast track program included a switch from systemic opioids to a local femoral nerve catheter block as the primary treatment of fracture pain, an earlier pre-operative assessment by the anesthesiologist, as well as a more systematic approach to nutrition, fluid and oxygen therapy and urinary retention before and after surgery. Results: 535 consecutive patients, aged 40 years and older were included in the study. In the intervention group, the rate of any in-hospital postoperative complication was reduced from 33% to 20% (p=0.002), odds ratio 0.61 (95%CI 0.4-0.9). Rates of confusion (9.5% versus 3.9%, p=0.02), pneumonia (10.6% versus 5.1%, p=0.03), and urinary tract infection (17.4% versus 6.7%, p<0.001) were reduced in the intervention group compared to the control group. The length of stay was reduced from 15.8 days to 9.7 days (p<0.001). For community dwellers, 12 months mortality was reduced from 23% to 12% (p=0.02) but the overall 12 months mortality was 29% in the control group versus 23% in the intervention group (p=0.2). Conclusions: The optimized hip fracture program reduced the rate of in-hospital postoperative complications and mortality. However, the results from this study have to be confirmed in randomized clinical trials which elucidate the elements of the program that have the greatest impact on clinical outcomes and mortality.

P14.15 INCOMPLETE ADHERENCE TO BEST PRACTICE GUIDELINES FOR ENVIRONMENTAL FALLS PREVENTION MAY INCREASE THE INCIDENCE AND SEVERITY OF FALLS. J. COOKE, I. PILLAY *(South Tipperary General Hospital, Ireland)*

Introduction: Inpatient falls contribute to both morbidity and mortality in the elderly. Risk factors for inpatient falls may be either individual to the patient or environmental. Adherence to best practice guidelines for ward environment1 may help minimise the risk of environmental falls. Methods: We applied an Environmental Audit tool to two wards (Ward 1 and 2) developed in different eras, thereby measuring each ward's compliance with best practice guidelines. We compared the incidence and severity of falls on each ward in the period 2003-2006, based on the Health Service Executive grading system. Results: Modern Ward 1 consistently complied better, though incompletely, with best practice guidelines than older Ward 2. The ratio of number of falls was 1.5:1 between Ward 1 and Ward 2. The ratio of injurious falls was 1.2:1. These trends did not reach statistical significance. Ward 1 has concrete flooring covered in linoleum as apposed to timber in Ward 2. 43% of total falls occurred during toileting. Patients are more likely to be toileted at the bedside on Ward 2 due to poor availability of toilets. There were no differences between each ward in terms of patient dependency, bed numbers, staffing or policies. Discussion: The layout of Ward 1 appropriately encourages staff to allow patients to mobilise independently. However, the trend to more frequent and more injurious falls may be contributed to by failure to completely follow Best Practice Guidelines. We also implicate the choice of flooring type in the severity of injury resulting from a fall.

P14.16 FALLS AND VITAMIN D AFTER ALENDRONATE+VITAMIN D OR REFERRED CARE: RATIONALE AND DESIGN. N. BINKLEY[1], S. BOONEN[2], C. ROUX[3], W. HE[4], R. ROSENBERG[5], Z. YANG[4] *(1. University of Wisconsin, Madison, WI, USA; 2. Center for Metabolic Bone Disease, Leuven, Belgium; 3. Paris Descartes University, Paris, France; 4. Merck & Co., Inc., Rahway, NJ, USA; 5. Merck & Co., Inc., North Wales, PA, USA)*

Objectives: Vitamin D is required for bone strength and also acts on muscle function. Vitamin D insufficiency is prevalent, and often overlooked by physicians. A planned study will examine the effects of a single tablet containing the bisphosphonate alendronate 70mg plus vitamin D3 5600IU (ALN+D) compared with referred care on serum vitamin D, falls, and physical function. Methods: In an upcoming international, randomized, controlled trial of 6 months with a 6-month extension, approximately 800 women (>65 years, osteoporotic, at increased risk of falls, with baseline 25 hydroxyvitamin D 8–20 ng/mL) will either receive ALN+D weekly or be referred to their primary care physicians (who are not investigators in the trial) for one of the usual osteoporosis therapies. Women in the ALN+D group with <1000mg daily calcium intake at baseline will receive 500mg elemental calcium/day. The primary endpoint will be proportion of patients with serum 25(OH)-vitamin D<20 ng/mL. Secondary endpoints will include bone turnover biomarkers. Exploratory endpoints will include the Short Physical Performance Battery (SPPB) and the relationships among genotype, RNA expression, total body composition, and SPPB. Endpoints of the trial extension will include 25(OH)D, bone mineral density, and fall event rate. All falls will be reported by patients to their study site. Fall-case report forms will be adjudicated by an independent committee, blinded to patient-treatment group. Safety will be monitored. Conclusion: This study may be able to demonstrate relationships among osteoporosis/vitamin D therapy, falls, physical function, and molecular/genetic information.

P14.17 THE PERSISTENCE OF ONE-TIME COUNSELLING IN REDUCING FALL-RELATED DRUGS AS PART OF RANDOMISED, CONTROLLED MULTIFACTORIAL FALL PREVENTION AMONG COMMUNITY- DWELLING OLDER PEOPLE. M. SALONOJA[1], P. AARNIO[1], T. VAHLBERG[2], S.-L. KIVELÄ[2] *(1. Satakunnan Sairaanhoitopiiri, Department of Geriatrics, Pori, Finland; 2. Turku University, Turku, Finland)*

Objectives: To evaluate the persistence of one-time counselling by a geriatrician to reduce fall-risk increasing drugs (FRID) as a part of multifactorial fall prevention lasting for 12 months. A community-based randomised, controlled trial in Finland. Participants: Five hundred ninety-one (259 in intervention group, IG, and 269 in control group, CG) persons aged 65 or older with a history of falling in previous 12 months and living at home or in sheltered house. Intervention: An individual geriatric assessment including instructions to withdraw psychotropic drugs, opioids, and strongly acting anticholinergics (FRID). Oral and written instructions were given. One-hour lecture about fall risks and drugs was later given to the intervention group. An overview about possibilities to prevent falls was told to the control group. Results: During the follow-up the number of regular users of psychotropic drugs decreased significantly by 22% in IG, but increased by 3% in CG. The number of regular users of benzodiazepines and related drugs (BDZ's) decreased significantly by 35% in IG, but increased by 4% in CG. The differences were significant.

The changes were noticed only in women. The number of regular users of all kind of FRID decreased significantly in women in IG. The numbers of irregular users of FRID, psychotropics and BDZ´s decreased significantly in both groups. Conclusions: One-time counselling of FRID by a geriatrician including a later one-hour lecture about drugs and of the risk of falls had positive effects by decreasing the numbers of regular users of psychotropic drugs, specially BZD's.

P14.18 PHYSICAL INACTIVITY AND PAIN IN OLDER MEN AND WOMEN WITH HIP FRACTURE HISTORY. A. SALPAKOSKI[1], E. PORTEGIJS[1], M. KALLINEN[2,3], S. SIHVONEN[4], I. KIVIRANTA[3,5], M. ALEN[3,6], T. RANTANEN[1,2], S. SIPILÄ[1] *(1. Finnish Center for Interdisciplinary Gerontology, University of Jyväskylä, Finland; 2. Department of Health Sciences, University of Jyväskylä, Finland; 3. Central Finland Health Care District, Jyväskylä, Finland; 4. National Public Health Institute, Helsinki, Finland; 5. Department of Orthopaedics and Traumatology, University of Helsinki, Finland; 6. Department of Medical Rehabilitation, Oulu University Hospital, Finland)*

Objective: Physical inactivity among older people is associated with mobility limitation and disability. Hip fracture often leads to long-term or permanent inactivity most likely due to the pain and fear of falling and perceived difficulty in moving. The purpose of this study was to investigate the association between severe musculoskeletal pain and low physical activity in men and women aged over 60 with a hip fracture history. Methods: Data consist of 79 community-dwelling people 0.5-7 years post hip fracture. Based on the level of physical activity (Yale Physical Activity questionnaire) the participants were divided into tertiles. The group with lowest physical activity (LPA) was compared to the other two tertiles using logistic regression analysis. Pain was assessed by VAS (range 0-100 mm). Those reporting pain >66 mm in the low back or hip/knee region were regarded as having severe pain. Results: Severe pain was reported by 63% of the subjects in the LPA compared to the 31% in subjects in the two upper tertiles. Subjects with sever pain had nearly four times (OR 3.7,CI95% 1.4 0-9.91) the risk for LPA compared to those with lower pain or no pain. Multivariate adjustments for sex, time from fracture and number of chronic diseases, did not materially change the estimate (3.8, 1.35-10.91). Conclusions: Pain is an important determinant of physical inactivity in older community-dwelling people with hip fracture history. Pain management seems to be an important factor for sustaining physical activity and independent living in elderly. Further study in order to develop effective strategies for rehabilitation are needed.

P14.19 SPORADIC AND FREQUENT FALLERS - IS THERE ANY DIFFERENCE BETWEEN THEM? K. SZCZERBINSKA *(Jagiellonian University Medical College, Institute of Public Health, Cracow, Poland)*

The study was conducted in the EUNESE project (funded by European Public Health Program 2003-2008) to register falls of residents of 7 nursing homes in Krakow, Poland. Objectives: To establish if there are any differences in circumstances of falls between residents who had been falling with higher frequency compared with those who fell sporadically. Methods: During 18 months of observation 302 falls were registered among 165 out of 822 elderly persons living in nursing homes. The frequency of falling was defined as a ratio of number of falls to number of days of observation for each patient. This group was next divided into 3 percentyl groups according to the value of the frequency of falls. Afterwards, generalized logit regression was applied to find out if there is a relation between frequency of falling and certain circumstances of falls (like place of fall, daily activity or environmental risk factors). Poisson regression model was used to assess if the frequency of falling was related to any category of drugs prescribed. Results: The circumstances of recurrent falls did not depend on the frequency of falling, but on the individuals who had fallen. Residents who were administered nitrates, antiparkinsonian drugs, anticonvulsives or theophylline had a significantly higher frequency of falling compared to patients not taking those drugs. Conclusions: General Practitioners should interview in detail about the first incident of fall since it may repeat in the same circumstances. They should pay more attention to treatment of epilepsy, Parkinson disease, COPD.

P14.20 THE UTILITY OF AN ALGORITHMIC REFERRAL ROUTINE (ARR) TO A GERIATRIC FALLS CLINIC (GFC) FROM AN EMERGENCY DEPARTMENT (ED) IN A UNIVERSITY HOSPITAL SETTING. G. VEDEL SØRENSEN, J. LAURITSEN *(Odense University Hospital, Geriatric Department, Odense, Denmark)*

Introduction: A cooperation between the Emergency department (ED) and the GFC was established April 2007 such that a nurse on a form indicates whether the patient (P) has been unconscious, has daily balance problems, more falls the previous year or suffers from dizziness. The form is regarded as a referral to the GFC if just one question is affirmed and P accepts. Methods: Data to indicate the utility of the (ARR) were taken from the patients' electronic medical record in the GFC and a database in the ED registering all accident related visits. Data were available for a period of 10 months. Results: 319 patients were referred to GFC from ED, of those 134 were assessed. Berg's balance scale (N=74), Timed up and Go (N=80) and Falls Efficacy Scale-International (FES-I) (N=82) all had positive Pearson correlations to each other with $p < 0.001$. MMSE were < 24 in 14.5%. Postural hypotension was found in 34.5%. Euroqol5d time trade-off was strongly correlated solely to FES-I. Conclusions: There is a substantial loss, 58 % referred to the GFC does not show up. The (ARR) must be revised to optimize its utility.

P14.21 POST OPERATIVE PAIN MANAGEMENT IN HIP FRACTURE PATIENTS. B. VINCENT[1], B. WAY[2], N. VERGIS[2], B. BATTACHARYA[2], A. CHATTERJEE[2], E. BRYDEN[2] *(1. Stoke Mandivelle Hospital, Aylesbury, UK; 2. Royal Berkshire Hospital, Reading, United Kingdom)*

Objectives: Fracture neck of the femur is a significant cause of morbidity and mortality in elderly patients. Management of peri-operative pain following hip fracture is difficult and often suboptimal. This study aims to analyze the current analgesia prescribing practice in post operative hip fracture patients. Methods: Prospective study of 67 patients with hip fracture over the age of 65. Results: The commonly prescribed analgesics were paracetamol (90%), codeine phosphate (63%) and tramadol (25%). Combination of two analgesics was required in 79% of patients, whilst 10.5% needed three analgesic agents and 4.5% needed four such medications. Further 3% received no analgesia. A total of 7.5% had analgesia prescribed not in accordance with WHO pain ladder. Conversion from Paracetamol and codeine to Paracetamol and tramadol was observed in five percent of patients for 'better' pain control. Femoral block was done only in 48% of patients. Incidence of constipation was 100%. None of the patients who had NSAIDS developed gastrointestinal bleed. Neither the type of surgery nor the fracture classification influenced the prescription of analgesia. Conclusions: • As clinicians become more vigilant, analgesia prescribing has improved. However suboptimal pain control still remains an issue in significant proportion of elderly patients with hip fracture. • This study strongly recommends regular prescription of laxatives and use of femoral block. • As pain control has an impact on morbidity, rehabilitation and length of stay in hospital, further work on developing analgesia prescribing guidelines in this condition is essential.

P14.22 FALLS - THE EFFECT ON FUNCTION, BALANCE CONFIDENCE AND QUALITY OF LIFE. A. BONNERUP VIND[1,2], H.E. ANDERSEN[1], K.D. PEDERSEN[1], T. JØRGENSEN[2], P. SCHWARZ[1] *(1. Research Centre for Ageing and Osteoporosis, Glostrup, Denmark; 2. Research Centre for Prevention and Health, Glostrup, Denmark)*

Objectives: The aim of this study is to register daily function (DF), balance confidence (BC), health related quality of life (HRQoL), psychological well-being and possible effects of multifactorial fall prevention on these, in elderly people in the year following a fall. Methods: Participants above 65 years were recruited after a fall requiring medical treatment. Participants were randomly assigned to a control group receiving usual care or an intervention group receiving geriatric assessment and multifactorial fall prevention. Data on DF (Barthel, FAI), BC (ABC), HRQoL (3 subscales of SF36: physical function, mental- and general health), psychological well-being (3 subscales of SCL-92: somatization, depression and anxiety; high score=distress), were collected at baseline, 6 and 12 months. Results: Of 1173 invited, 392 elderly participated, median age 74 years, 74 % women. The groups, 196 participants in each, were comparable at baseline for all variables. Barthel and FAI are unchanged over time and equal between groups. A similar increase in ABC is seen in both groups. Physical function and mental health increase similarly in both groups, general health score appears stable in the intervention group and decreases in the control group. Somatization and depression decreases similarly in both groups, anxiety decreases more in the intervention group ($p=0.04$). Data are preliminary, further analysis will be performed prior to presentation. Conclusions: It appears that balance confidence, psychological well-being, physical function and mental health increases in the year following a fall, regardless of intervention. Intervention appears associated with further decrease in anxiety, and maintenance of general health.

P14.23 THE EFFECT OF MULTIFACTORIAL FALL PREVENTION AMONG ELDERLY DANES WITH FALLS. A. BONNERUP VIND[1,2], H.E. ANDERSEN[1], K.D. PEDERSEN[1], T. JØRGENSEN[2], P. SCHWARZ[1] *(1. Research Centre for Ageing and Osteoporosis, Glostrup, Denmark; 2. Research Centre for Prevention and Health, Glostrup, Denmark)*

Objectives: The aim of this study is to evaluate the effect of multifactorial fall prevention in a Danish population. Methods: Participants at or above 65 years were recruited after a fall requiring hospitalization or emergency room attendance. After collection of baseline data, they were randomly assigned to intervention or control groups. Participants in the intervention group were systematically examined by a doctor, a nurse and a physiotherapist, and intervention was provided against all risk factors discovered, while participants in the control group received usual care. Participants recorded falls in a diary, and were visited at 6 and 12 months for information on outcome. Results: Of 1173 invited, 392 elderly agreed to participate, median age 74 years, 74 % women. The groups, 196 participants in each, were comparable at baseline. Participants in the intervention group delivered data on falls for a total of 2289 months (97%) and in the control group the figures were 2213 months (94%). Data are preliminary. We registered 399 falls in the control group and 420 in the intervention group. Fall rate in both groups are 2,2 falls pr. personyear. In the intervention group we registered 44 falls requiring medical attention (rate 0,019 falls pr. personyear), while the figures for the control group was 56 (rate 0,025 falls pr. personyear). More elaborate results will be presented at the congress. Conclusions: A preliminary analysis of data from a study of multifactorial fall prevention among elderly Danes, show no effect on number of falls or fall rates.

P14.24 IS A MEDICAL GERIATRIC INTERVENTION NECESSARY BEFORE TRAINING ELDERLY COMMUNITY-DWELLING PERSONS WITH A RISK OF FALLING? D. ZINTCHOUK, M. MØRCH, E.M. DAMSGAARD *(Geriatric Department, Aarhus University Hospital, Denmark)*

Objectives: The aim of the present study was to examine how often a medical geriatric examination alone uncovered other causes than reduced vestibular function in patients

admitted to a fall clinic. Methods: All patients referred to a newly opened fall clinic were examined by a geriatrician. The intervention included: medical history, objective examination, relevant paraclinical examination, neurological, cardiologic and otologic examinations. Patients were treated accordingly and medication adjustment was done. Results: 187 patients referred from general practitioners to the fall clinic over the first 20 months, went through a medical geriatric intervention. Mean age was 81 (65-95 years). The causes of referral were dizziness (56%), history of falls (46%), decreased functional level (14%), syncope (3%). Most of the patients had more than one cause. The following main conditions were exposed: vestibular dysfunction (28%), muscle/joint diseases (23%), inappropriate medication (21%), cerebrovascular disorders (20%), cardiac diseases (5%) and other disorders (3%). 67 (36%) patients were treated for the medical conditions and discharged without a need for training, 40 (21%) are still undergoing examinations, 54 (28%) went through vestibular training, 28 (15%) went through other trainings forms. Conclusions: Our results indicate that geriatric intervention, especially examination of co-morbidity and adjustment of medication, may be important for elderly persons with loss of function before referral to a training program.

P15 FRAILTY

P15.01 LOW HAEMOGLOBIN IS ASSOCIATED WITH FURTHER FUNCTIONAL DECLINE IN PATIENTS ADMITTED FOR HEART FAILURE. M. DE SAINT-HUBERT[1], C. DIVOY[1], P. GODART[2], D. SCHOEVAERDTS[1], C. SWINE[1] *(1. Cliniques Universitaires de Mont-Godinne, Yvoir, Belgium; 2. Unité de Recherche en Biologie Cellulaire, FUNDP, Namur, Belgium)*

Background: Reduced haemoglobin in congestive heart failure (CHF) has been independently associated with increased risk of hospitalization and all-cause mortality. Functional consequences of anemia in CHF may nevertheless also influence quality of life and health care needs. In a study designed to evaluate the clinical significance of biological markers in predicting functional decline (FD) in hospitalized elderly, we aimed to know the functional impact of anemia in CHF. Methods: Prospective cohort study with a sub-group of patients admitted for acute episode of CHF. ADL were assessed in premorbid conditions and reassessed three months after discharge. Haemoglobin level was measured at admission and at one week of hospitalisation. An increase of one point in the ADL score or death at three months was defined as a FD. Results: Thirty-nine patients were included. At three months, 22 (56.4%) patients declined (including 10 deaths). There was a significant difference in admission haemoglobin level between decliners and non-decliners (respectively 11.0±1.0 g/dl and 12.6±1.5g/dl, p<0.001), with persistence after one week of hospitalisation (10.7±1.0 g/dl and 13.0±1.4 g/dl, p<0.0001). This association remained significant when considering surviving patients only (p=0.0003 and p<0.0001). Discussion: Reduced haemoglobin is a significant predictor of FD following admission for CHF. At-risk patients may be detected at admission or during hospitalization in order to improve care management. Is anemia cause of FD or consequence of increased disease severity? Further studies are needed to test if improving haemoglobin level prevents functional decline, or whether low haemoglobin is only an indicator of severe CHF.

P15.02 COMPREHENSIVE GERIATRIC ASSESSMENT OF OLDER PATIENT ADMITTED AT AN EMERGENCY SHORT STAY UNIT IN A TERTIARY HOSPITAL. C. FERNÁNDEZ ALONSO, F.J. MARTIN SANCHEZ, J. GONZALEZ DEL CASTILLO, M. FUENTES FERRER, J. GONZALEZ ARMENGOL, P. VILLARROEL, C. VERDEJO BRAVO, J.M. RIBERA CASADO *(Hospital Clínico San Carlos, Geriatrics/Emergency Department, Madrid, Spain)*

Aims: To detect frail elderly patient admitted at the emergency short stay unit (ESSU) of a tertirary hospital andTo determine the relationship between CGA, long stay and discharge destination. Patients and Methods: prospective analysis of 61 elder patient (>65 year old) assessed through CGA admitted at the ESSU of Hospital Clínico San Carlos (Madrid) during one month (april of 2008) . We analized clinical, functional and mental variables: Main Diagnosis at admission, Charlson Comorbidity Index, Barthel Index (basal, at admission),Lawton&Brody Index, S-ICODE (validated version in Spanish of IQCODE) and Confussional Assesment Method (CAAM). Then we stadied long stay and discharge destination. Results: N=61. 72,1% women, mean age 80,74 (SD 8,14).Clinical Variables: Diagnosis at admission: acute infection (n=19), acute heart failure (n=15), syncope (n=9), arrytmias (n=5), bowel obstruction (n=7) and gastrointestinal bleeding (n=6). Mean Charlson Index: 2,30 (1,3).Functional variables were: basal Barthel 79,02 (65,100), admission Barthel 62,62 (40,90), Funtional Impact (basal - admission Barthel) 16,39 (0,25). Lawton 4,79 (3,7).S-ICODE 45,05 (42,47). CAAM (+) (n=7). Mean length of stay 1,48 (1-2) days. Discharge Destination: at home (n=22). Patient not discharged at home were older than 80 years; mean Charlson higher 2,27; mean barthel (basal <77, at admission<59), mean Lawton <5 and S-ICODE>45. Conclusions: CGA applied to all elder patient admitted at a emergency Unit help to detect frail patient in orther to prevent dependency and helping to place patient correctly at admission and discharging.

P15.03 FINDING, EVALUATING AND IMPLEMENTING STANDARDIZED OT AND PT TESTS FOR THE FRAIL ELDERLY IN A GERIATRIC REHABILITATION UNIT. B. HOVMAND, A.E. LARSEN, S. PEDERSEN, S. VINKLER, K. CHRISTENSEN, C.V.U. ØRESUND *(University College, Faculty of Occupational Therapy, Faculty of Physiotherapy, Copenhagen, Denmark, Frederiksberg Healthcare Centre, Geriatric Rehabilitation Unit, Denmark)*

Objectives: To examine current use of tests and evaluations in a geriatric rehabilitation unit, and find standardized tests covering all ICF domains and evaluate the clinical and practical use of them. Methods: The study had 4 phases. Phase1and 2: Field observation (by OT and PT) of treatment of 12 frail elderly and interview with their therapists. Phase 3: Literature search and selection of appropriate tests. In Phase 4, the practical use of the tests was observed and discussed with the therapists using field observation and interviews. 29 frail elderly, median age 85 years, with co-morbidity were tested. Results: To cover the Physical domain Verbal Rating Scale (VRS), Tandem test (TT), Chair stand test (CST) and Functional Status Score (FSS) were chosen. Results from admission and discharge showed that VRS, TT, CST and FSS improved significantly (Wilcoxons rank sum test: p= 0.0361, p=0.004, p=0.0012, p=0.0078 respectively). The therapists and the organization evaluated all tests as relevant and easy to use. ADL -taxonomy and AOF (assessment of occupational functioning) were chosen to cover the Activity and Participation domain, and used on admission. Therapists and the organization evaluated ADL-taxonomy suitable for the population and able to describe the activity-problems of the frail elderly. AOF was evaluated unsuitable for this population, due to ethical problems. Conclusions: All physical tests will be implemented in the geriatric rehabilitation centre. The ADL- taxonomy is implemented but in a modified version. Appropriate tests in Danish to cover the domain of Participation have not been identified yet.

P15.04 APOLIPOPROTEIN E E4 ALLELE IS ASSOCIATED WITH THE MULTIDIMENSIONAL IMPAIRMENT OF THE ELDERLY: A PROSPECTIVE STUDY OF 1894 HOSPITALIZED ELDERLY PATIENTS. M.G. MATERA[1], V. GOFFREDO[1], M. FRANCESCHI[1], G. D'ONOFRIO[1], F. ADDANTE[1], C. GRAVINA[1], M. URBANO[1], D. SERIPA[1], B. DALLAPICCOLA[2], A. PILOTTO[1] *(1. Department of Medical Sciences, Geriatric Unit & Gerontology and Geriatrics Research Laboratory, San Giovanni Rotondo, Italy; 2. Department of Research, CSS Mendel Institute, Rome, Italy)*

Introduction: Multidimensional impairment in older subjects results from a combination of biological, functional, psychological, pathological and environmental factors. The role of genetics on multidimensional impairment, however, is undefined. Aims: we investigated the role of Apoliprotein E (ApoE) polymorphism on the multidimensional impairment as evaluated by the Multidimensional Prognostic Index (MPI) based on a standardized Comprehensive Geriatric Assessment (CGA) in hospitalized elderly patients. Methods: 1894 elderly patients consecutively hospitalized (M=9.06, F=988, mean age 78.29±6.97 years, range=65-100 years) were enrolled. A standardized CGA including ADL, IADL, SPMSQ, MNA, Exton-Smith scale, CIRS, drug use and social support network was used to calculate the MPI for one-year mortality. MPI was calculated from the aggregated total scores and expressed as a score from 0 to 1. Three grades of MPI were identified, i.e. low-risk, range=0.0-0.33; moderate-risk, range=0.34-0.66 and severe-risk, range=0.67-1.0. ApoE genotypes were analyzed according to standard methods. Results: a significant higher frequency of ApoE e4 allele in patients with severe-risk MPI vs low-risk MPI (24.68% vs 15.79%; p=0.002, OR=1.764, 95%CI 1.225–2.539) and moderate-risk MPI (24.68% vs 17.14%; p=0.014, OR=1.574, 95%CI 1.095–2.263) was found. A significant minor frequency of ApoE e3/e3 in patients with severe-risk MPI vs low-risk MPI (63.83% vs 73.18%; p=0.004, OR=0.624, 95%CI 0.454–0.858) and moderate-risk MPI (63.83% vs 72.73%; p=0.009, OR=0.652, 95%CI 0.474–0.897) was found. No significant differences in the distribution of ApoE e2 allele were observed. Conclusions: the ApoE/e4 allele is significantly associated with the multidimensional impairment of hospitalized elderly patients.

P15.05 MEASURES OF NUTRITIONAL STATUS AND THE EFFECT OF NUTRITIONAL SUPPLEMENTATION AND BODY MASS INDEX ON FUNCTIONAL INDEPENDENCE. D. NI CHROININ[1], H. O'BRIEN[1], D. POWER[2] *(1. Mater Misericordiae University Hospital, Dublin, Ireland; 2. St. Mary's Hospital, Phoenix Park, Dublin, Ireland)*

Optimisation of independence and quality of life are the ideals which drive our practice. Frailty, associated with malnutrition and sarcopenia, often precipitates admission to long-term care (LTC). Nutritional augmentation, with protein and caloric supplements, is a cornerstone of management in patients judged to be malnourished on admission. The objective is to increase physiological reserve and muscle mass. Traditionally accepted targets of success would be achievement of Body Mass Index (BMI) 20-25kg/m2. However, BMI may be a misleading measure of nutritional status in the elderly. Reasons may include osteoporosis, constipation, and fluid retention. Bio-impedance analysis (BIA) is a novel method to determine fat-free mass, utilising algorithms based on the differential electrical resistance of fat and muscle. We assessed BMI, BIA and Barthel Indices of 50 patients admitted consecutively to a LTC facility, at baseline and at 3 months. Those with a low BMI on admission received nutritional supplementation as per usual practice. 27/50 patients had BMI <20kg/m2 on admission, and were prescribed nutritional supplements. By 3 months, 6 of these achieved a normal BMI (22%). However functional status, determined by Barthel Index, had declined in this group. On the other hand, in the 19 of 50 patients who made gains in fat-free mass, as assessed by BIA, functional status had improved. We conclude measures of fat-free mass allow superior assessment of nutritional status, and better correlate with physiological function. An integrated strategy of physical activity and nutritional supplementation will augment fat-free mass, with a positive effect on functional status.

P15.06 FRAILTY AND CHRONIC KIDNEY DISEASE IN A GROUP OF HOSPITALIZED ELDERLIES. E. SANTILLO[1], G. VENTURA[1], M. MIGALE[2], S. CASSANO[1], F.P. CARIELLO[1] *(1. Division di Cardiologia Istituto 'Ninetta Rosano', Belvedere Marittimo, Italy; 2. DEA, UO Pronto Soccorso, PO di Praia a Mare, Italy)*

Purpose: Frailty is a geriatric syndrome, characterized by increased vulnerability for adverse health outcomes. In aging subjects chronic kidney disease (CKD) is another major health problem leading to a higher risk for all-cause mortality. It has been argued that

CKD itself could contribute to frailty but there are still few studies about this topic. Aim of our work was to investigate in a group of hospitalized elderlies, eventual association between frailty and CKD. Materials and Methods: We enrolled 76 old patients (32 Male; mean age: 77 ± 6 years) consecutively hospitalized at our Clinic. We performed complete clinical examination and ematochimic laboratory tests. In all participants Creatinine Clearance (CCl) was estimated using both Cockroft-Gault (CG) and MDRD formulas indexed on body surface area. CKD was defined as having CCl < 60ml/min. Frailty status was defined using a scale previously validated in participants of the CSHA study by Rockwood et al. Results: Prevalence of frail patients was 36%. Frail patients had significantly higher values of Creatinine and BUN and significantly lower CCl both obtained with CG, and with MDRD formula ($p < 0,05$ by T-Test). A significant association was found between frailty and presence of CKD evaluated by both CCl formulas ($p < 0,05$ by Chi-square). Conclusions: Our results evidenced significant correlations between frailty and CKD. Chronic kidney disease could play a major role in determination of frailty in geriatric patients. Physicians which take care of elderlies affected by CKD should pay particular attention in analysis of their frailty status.

P15.07 INCREASED RISK OF HOSPITALIZATION IN OLDER ADULTS WITH HIGHER ELDERLY AT RISK (EAR) SCORE. S. CRANE, P. TAKAHASHI, E. TUNG, A. CHANDRA, A. YU-BALLARD, G. HANSON *(Mayo Clinic, Department of Medicine, Rochester, MN, USA)*

Introduction: Identifying predictors of 2-year hospitalization using a model from electronic information is a potentially important tool for clinicians. Aims: The objective was to determine the relationship between score on the elderly at risk (EAR) model and 2-year hospitalization rates. Methods: This was a retrospective cohort study of patients over 60 impaneled in primary care on January 1st 2005. The EAR utilizes scores on a weighted fashion based of age, gender, prior hospitalizations, and comorbid health conditions. Each subject was scored and placed into 6 groups with top group representing the top 10% of scores. Data analysis involved logistic regression for hospitalization within 2 years. Results: There were 12, 650 patients with scores from the EAR from -7 to over 16. The average age in the top 10% by score was 80.7 yrs +/- 8.4 yrs compared to 65.0 yrs +/- 4.3 yrs in the bottom 15% ($p<0.001$). All comorbid conditions had significantly higher proportions in the highest 10% compared to the lowest group. The mean number of hospitalizations in 2 years in the bottom 15% was 0.4 +/- 0.8 days compared to 2.6 +/- 2.9 days in the top 10%.The relative risk of hospitalization in 2 years in the top group was 13.3 [95% CI 11.2-15.9] compared to the lowest 15% group. Discussion: Older adults with higher EAR model scores had 13 fold higher risk of hospitalization in 2 years. The application of this model using electronic population management could help with potential patient management in the future.

P15.08 MOBILITY AND FRAILTY IN COMMUNITY-DWELLING OLDER PEOPLE: THE EFFECT OF WEIGHT LOSS. M. VANDEWOUDE[1], S. HOECK[2], J. GEERTS[3], G. VAN HAL[2], J. VAN DER HEYDEN[4], J. BREDA[3] *(1. University of Antwerp, Department of Geriatrics, Berchem, Belgium; 3. University of Antwerp, Department of Sociology, Belgium; 4. Scientific Institute of Public Health, Belgium)*

Aims: Correlation of BMI (Body Mass Index) with frailty and mobility in community-dwelling elderly according to age. Methodology: Data from the Belgian Health Interview Surveys of 1997, 2001 and 2004 (n=37.387) are used. Frailty is measured with the VIP (Variable Indicative of Placement)-tool, which gauges 'living alone', need for assistance with washing and dressing, and mobility outside the neighborhood. People are assigned to a high or low-risk group for frailty. Mobility is assessed by limitation in transfers and in walking distance. The relation between BMI, frailty and mobility is examined with Chi-Square analysis and logistic regression (SPSS for Windows 14.0). Results: The sample contains 6515 people over 65 years out of 37.387. There is a shift of BMI to lower values with increasing age. In the 85+ cohort 9.6% has a BMI lower than 18.5 compared to 1.8% in the 65-69 yr group ($p \leq 0.001$). Mobility problems and risk for frailty score significantly higher in the lower BMI classes (cfr Table: data for all 65+).

BMI	< 17	17 – 18.5	18.5 - 25	25 - 30	30 – 40	> 40
N (total=6515)	75	139	2813	2512	940	36
Severe limitation in mobility: "a few steps" (%)	21.2	23.1	8.6	7.6	14.0	38.0
Normal walking distance: > 200 m (%)	35.9	51.8	75.9	77.5	66.0	42.9
Frailty (%)	30.3	41.8	14 .4	11.6	18.5	35.9

Conclusions: There is a progressive loss of weight with aging. This is significantly correlated with frailty and loss of mobility in community dwelling elderly.

P15.09 ANEMIA IN THE ELDERLY – IMPORTANT DIAGNOSTIC AND THERAPEUTIC PROBLEM. P. WEBER, H. MELUZÍNOVÁ, J. HRUBANOVÁ, H. KUBEŠOVÁ, V. POLCAROVÁ *(Department of Internal Medicine, Geriatrics and Practical Medicine, Faculty Hospital and Masaryk University, Brno, Czech Republic)*

Background: Although anemia is more prevalent as aging proceeds, it cannot be assumed that it happens due to aging alone. The biggest prevalence of anemia is in the oldest old who are hospitalized. Purpose: An analysis of occurrence and charactertistics of anemia in the elderly 65+ y. admitted to geriatric department. Patients and Methods: A group of 246 old anemic patients (aged 81±7,2 y.) was affected by pathologically decreased hemoglobin (< 110 g/l) and clinical signs of anemia. All the presented patients underwent a complete intern examination (iron, ferritin, transferin, B12, folat, zinc inclusive) and complex geriatric assessment, too. Results: Hemoglobin by hospital admission in average was 93,4 g/l and below 80 g/l in 58 cases. MCV was normal in 66% of patients; below 80 fentoliter in 24% and above 95 fl in 10% of them. Low iron level though was present in 192-times (78%) and low zinc level was together in this anemic patient set present in 135 cases (59%). The patients received transfusion 58-times and in all the cases anemia was managed according to its origin. Conclusions: Anemia in the elderly is often caused by a benign disease and, in fact, may simply be a marker of a chronic illness. It may be, however, a presenting sign of a serious disease, including cancer. Anemia in old patients often means the one in chronic disease. Authors emphasize the important role of low iron and zinc in the elderly.

P16 GASTROENTEROLOGY

P16.01 ANTIBIOTIC STEWARDSHIP IN PATIENTS WHO DEVELOP CLOSTRIDIUM DIFFICILE DIARRHOEA. P. CAMPBELL[1], E. HENDERSON, M. MACMAHON[2] *(1. Musgrove Park Hospital, Taunton, UK; 2. Bristol Royal Infirmary, Bristol, UK)*

Introduction: Clostridium Difficile diarrhoea (CDD) is the major infective cause of hospital acquired diarrhoea. The chief risk factor for the development of CDD is antibiotic use. We aimed to confirm the need for antibiotics by reviewing the documented evidence for infection in patients who developed CDD. Methods: We performed a retrospective evaluation of 50 consecutive inpatients with proven CDD. We reviewed demographic data, risk factors for CDD, comorbidity, recorded evidence for infection, morbidity and mortality data. Results: The study population was 70% female with a median age of 83 (range 25-99). 72% lived independently at home and 60% were medical patients. Prior to developing diarrhoea 94% had received antibiotics, 34% had a single antibiotic and 66% had 2 or more antibiotics. In 5 % we could find no indication for antibiotic prescription. Though the majority had symptoms and signs, in 43 % there was no biochemical, haematological or radiological evidence for infection. Only 38% had the indication for prescribing antibiotics documented and only 15% of microbiological samples were positive. Discussion: Developing CDD is almost exclusively preceded by antibiotic use. In our cohort we were using courses of multiple antibiotics. In other studies this has been shown to increase the likelihood of developing CDD. In our study population we noted a high prevalence of a lack of documented evidence of infection. With the long length of inpatient stay and associated morbidity and mortality rates found in CDD it is unacceptable to use antibiotics without good evidence of bacterial infection.

P16.02 HELICOBACTER PYLORI INFECTION IN PATIENTS REFERRED TO A GERIATRIC OUTPATIENT CLINIC. A.B.L. PEDERSEN, M.M. MØRCH, C.H. FOSS *(Geriatric Department G, Aarhus University Hospital, Aarhus, Denmark)*

Background: In the literature 26-35 % of elderly patients with previous ulcers were found Helicobacter Pylori (HP) positive. Symptoms of peptic ulcers are often vague or absent in older people. Indications for testing for HP and treatment with antibiotics are still a matter of debate. Aims: Attempt to establish relevant indications for indications for HP test in elderly patients. Methods: Patients presenting at our geriatric outpatient clinic from May 2006 to December 2007 with symptoms suggestive of an HP infection were examined with a routine test for HP infection; 13 C-Urea Breath Test (UBT). Patients tested for HP were selected retrospectively from the database in the clinical biochemical department. Data concerning indications for performing the UBT originates from the medical records. The UBT used has a sensitivity of 98.5 % and specificity of 98.0 %. Results: 39 patients had a UBT test. Seven patients were found positive (18%). Their mean age was 82.8 years (range: 65-100). Patients were tested if they exhibited one or more of the following characteristics: microcytic anaemia, dyspepsia, nausea or abdominal pain independently of treatment with NSAID/ASA. Plasma haemoglobin and age were not correlated to the outcome of UBT. Conclusions: The percentage of HP positive patients was lower than expected and inconclusive. The future perspective is to be able to select the group of elderly patient, who will benefit from HP diagnosis and treatment. A prospective study including more patients on the benefits and shortcomings of testing for HP in elderly is being planned.

P16.03 SYMPTOMATOLOGY OF ESOPHAGITIS AND PEPTIC ULCER IN ELDERLY PATIENTS: A PROSPECTIVE, MULTICENTER, ENDOSCOPIC STUDY. M. FRANCESCHI[1,4], S. MAGGI[2], A. PILOTTO[1], M. NOALE[2], G. PARISI[3], G. CREPALDI[2] *(1. Geriatric Unit, Department of Medical Sciences, IRCCS "Casa Sollievo della Sofferenza", San Giovanni Rotondo (FG), Italy; 2. Aging Section, National Research Council, Padova, Italy; 3. Internal Medicine Department, General Hospital, Feltre, Italy; 4. Gastroenterology Unit, University of Parma, Italy)*

Aims: to evaluate clinical features of elderly patients with endoscopy diagnosed esophagitis (ESO) and peptic ulcer (PU). Methods: We studied 649 elderly subjects (M=314, F=335, mean age=71.8±7.0, range=60–93 years) who underwent an upper GI endoscopy. In all patients, the UGISQUE (Upper GastroIntestinal Symptom Questionnaire for the Elderly), a validated tool that includes 15 items divided into five symptom clusters: A) abdominal pain (1.stomach ache/pain,2.hunger pain in stomach); B)reflux syndrome (3.heartburn,4.acid reflux); C)indigestion syndrome (5.nausea,6.rumbling in stomach,7.bloated stomach,8.burping); D)bleeding (9.haematemesis,10.melena); E)nonspecific symptoms (anemia, anorexia, weight loss, vomiting, dysphagia), was used.

Fisher test, logistic regression and K index were used for statistical analysis. Results: At endoscopy 96 patients had esophagitis (ESO), 142 hiatus hernia without esophagitis, 28 peptic ulcer (PU), 66 erosive gastritis (EG), 151 non-erosive gastritis, 63 duodenitis, and 103 had no lesions (NL). Patients with ESO demontrated a significant association with the presence of abdominal pain (p=0.002, sensitivity=79%, specificity=41%, diagnostic accuracy=59%), reflux syndrome (p<0.0001, sensitivity=92%, specificity=46%, diagnostic accuracy=68%), and non-specific symptoms (p=0.03, sensitivity=41%, specificity=76%, diagnostic accuracy=58%). Patients with PU, demonstrated a significant association with bleeding (p=0.009, sensitivity=100%, specificity=81%, diagnostic accuracy =81%) and non-specific symptoms (p<0.0001, sensitivity=71%, specificity=76%, diagnostic accuracy =75%). Logistic regression analysis demonstrated that ESO was significantly associated with the presence of reflux syndrome symptoms (OR=9.23, 95%CI=4.1-20.9) while PU was significantly associated with the presence of non-specific symptoms (OR=7.98, 95%CI=2.9-21.9). Conclusions: Esophagitis and peptic ulcer in elderly patients demonstrate a wide pattern of symptoms, including high prevalence of non-specific symptoms and low prevalence of pain.

P16.04 CHRONIC HELICOBACTER PYLORI INFECTION ASSOCIATED WITH AN ATHEROGENIC, MODIFIED LOW-DENSITY LIPOPROTEIN IN A GENERAL POPULATION IN JAPAN. N. FURUSYO, T. KOGA, H. OHNISHI, S. MAEDA, H. TAKEOKA, K. TOYODA, E. OGAWA, Y. SAWAYAMA, J. HAYASHI *(Department of General Medicine, Kyushu University Hospital, Fukuoka, Japan)*

Objectives: The aim of this population study was to determine how chronic Helicobacter pylori (HP) infection affects an atherosclerosis through serum lipid levels. Methods: We investigated the association between HP infection, lipid profiles, and atherosclerosis in 1678 residents (494 males and 1184 females, age range 26 to 78 years) of a suburban Japanese town in 2007. Antibody to HP (anti-HP) was determined by Enzyme-linked immunosorbent assay in their serum samples. Serum low density lipoprotein-cholesterol (LDL-C) and small dense LDL-C (sdLDL-C) were measured using kits provided by the Denka-Seiken Corporation (Tokyo, Japan). Carotid atherosclerosis was evaluated by ultrasonic measurement of the maximum and mean intima-media thickness (max-and mean-IMT). Results: Overall, 41.0 % of the subjects were positive for anti-HP with no significant deference in the prevalence between males and females (42.7 % and 40.4 %). Anti-HP-positive residents had significantly higher mean values for serum LDL-C and sdLDL-C (125.1 mg/dl and 34.7 mg/dl) than anti-HP-negative residents (119.2 mg/dl and 31.6 mg/dl) (p<0.05). The max-and mean IMT of anti-HP-positive residents (0.82 ± 0.37 mm and 0.59 ± 0.11 mm) were significantly higher than those of anti-HP-negative residents (0.75 ± 0.32 mm and 0.58 ± 0.11 mm). The fasting values of triglycerides, plasma glucose, insulin, or HDL-cholesterol showed no significant deference between anti-HP-positive and negative residents. Conclusions: Chronic HP infection affects lipid metabolism, especially by elevating LDL and sdLDL, both well known atherosclerosis risk factor, in a way that could increase the risk of atherosclerosis. Thus chronic HP infection is associated with atherosclerosis through such change in the lipid system.

P16.05 THE INCIDENCE OF GERD IN HELICOBACTER PYLORI-POSITIVE OR NEGATIVE ELDERLY SUBJECTS. M. KAMIGAKI, I. NAKAGAWA, Y. KUMEI, N. HAYASHI, Y. TAKASUGI *(Fukagawa Daiichi Hospital, Japan)*

Objectives: Hp infection induces atrophy of gastric mucosa with age, resulting in hypochlorhydria. Therefore subjects infected with Hp for a long time may be considered as a low risk group of GERD. In this study we investigated the relationship between Hp infection and the incidence of GERD in elderly subjects. Methods: A total of 59 subjects (age range 65-84) underwent endoscopy. Serum Hp IgG antibody, pepsinogen (PG) I/II ratio were measured. Physical symptoms such as heartburn were evaluated by QUEST. Results: Hp IgG antibody positive group (Pg) was 61%(36/59) and the negative group (Ng) was 39%(23/59). PG I/II ratio in Pg was significantly lower than that in Ng, 2.5+1.8 and 4.9+1.1, respectively (t-test, p<0.001). Subjects of 4 points and above in the score for QUEST, who are strongly suspected of GERD, were 33%(12/36) in Pg and were 39%(9/23) in Ng. The endoscopic-positive GERD more than grade A was 16%(6/36) in Pg and 17%(4/23) in Ng. There were no significant difference in the incidence of GERD between these two groups (χ2-test). Conclusions: Although the grade of gastric-mucosal atrophy in Pg was significantly higher than that in Ng, there was no significant difference in the incidence of GERD between Pg and Ng in regard to the score for QUEST and the prevalence of endoscopic-positive GERD. Therefore it is assumed that age-dependent dysfunction of preventive mechanisms against reflux such as a decrease in lower esophageal sphincter pressure, is one of important causative factors in the development of GERD in elderly subjects.

P16.06 PREVALENCE OF UPPER GASTROINTESTINAL SYMPTOMS AND THEIR ASSOCIATION WITH FUNCTIONAL AND CLINICAL CHARACTERISTICS IN 3100 ELDERLY OUTPATIENTS. S. MAGGI[1], A. PILOTTO[2], M. NOALE[1], L. FRANCESCHI, G.C. PARISI[3], G. CREPALDI[1] *(1. Aging Section, National Research Council, Padova, Italy; 2. Department of Medical Sciences, Geriatric Unit, IRCCS "Casa Sollievo della Sofferenza", San Giovanni Rotondo, Italy; 3. Internal Medicine Department, General Hospital, Feltre, Italy; 4. Gastroenterology Unit, University of Parma, Italy)*

Aim of the study was to evaluate the prevalence of the upper gastrointestinal symptoms and their association with functional and clinical characteristics in elderly outpatients in Italy. Methods: The study was carried out by general practitioners in elderly outpatients. By using a structured interview, data on age, gender, education, Body Mass Index (BMI), smoking-alcohol-coffe use, functional status according to Barthel-ADL, concomitant diseases and therapies were recorded. The UGISQUE (Upper GastroIntestinal Symptom Questionnaire for the Elderly), a validated tool including 15 items divided into five symptom clusters: A) abdominal pain; B) reflux syndrome; C) indigestion syndrome; D) bleeding: E) nonspecific symptoms (anemia, anorexia, weight loss, vomiting, dysphagia), was used. £q2 and Fisher test, GLM procedure, Cochrane-Armitage test for trend and logistic regression were considered. Results: 3100 subjects (M=1547, F=1553, mean age=72.2,,b6.2, range=60-100 years) were included in the analysis. The overall prevalence of upper gastrointestinal symptoms was 43.0%, i.e. cluster A)=13.8%, B)=21.8%, C)=30.2%, D)=0.3%, E)=5.7%. Patients with symptoms were significanlty older (p=0.05) and disable (p<0.0001) than subjects without symptoms. Moreover, significantly higher BMI (p=0.0005) and more concomitant diseases (p<0.0001) and therapies (p<0.0001) were observed in symptomatic vs non-symptomatic subjects. Logistic regression analysis demonstrated that female sex (OR=1.78,95%CI=1.35-2.35), disability (OR=2.13,95%CI=1.14-4.01), BMI (OR=1.07,95%CI=1.03-1.11), upper gastroenterological (OR=8.44,95%CI=5.40-13.19), lower gastroenterological (OR=2.93,95%CI=1.66-5.15), psychiatric (OR=1.80,95%CI=1.16-2.81), respiratory (OR=1.57,95%CI=1.07-2.31) and heart diseases (OR=1.54,95%CI=1.12-2.12) were significantly associated with upper gastrointestinal symptoms. Conclusions: Female sex, disability and obesity are significantly associated with upper gastrointestinal symptoms. Other than gastroenterological diseases, psychiatric, respiratory and heart disorders were also associated with symptoms.

P16.07 VALIDATION OF A NEW QUESTIONNAIRE FOR THE EVALUATION OF UPPER GASTROINTESTINAL SYMPTOMS IN THE ELDERLY (UGISQUE). S. MAGGI[1], A.PILOTTO[2], M. FRANCESCHI, M. NOALE[1], G.C. PARISI[3], G. CREPALDI[1] *(1. Aging Section, National Research Council, Padova,, Italy; 2. Geriatric Unit, Department of Medical Sciences, IRCCS "Casa Sollievo della Sofferenza", San Giovanni Rotondo, Italy; 3. Internal Medicine Department, General Hospital, Feltre, Italy; 4. Gastroenterology Unit, University of Parma, Italy)*

Aims: To validate a questionnaire for evaluation of Upper GastroIntestinal Symptoms in Elderly patients (UGISQUE). Methods: We studied 206 consecutive elderly subjects (M=89,F=117, mean age=76.2, range=62–96 years) who underwent an upper GI endoscopy. The UGISQUE includes 15 items divided into five symptom clusters: A)abdominal pain (1.stomach ache/pain,2.hunger pain in stomach); B)reflux syndrome (3.heartburn,4.acid reflux); C)indigestion syndrome (5.nausea,6.rumbling in stomach,7.bloated stomach,8.burping); D)bleeding (9.haematemesis,10.melena), E)non-specific symptoms (11.anaemia,12.anorexia,13.weight loss,14.vomiting,15.dysphagia). Fisher test, logistic regression and K index to assess sensitivity, specificity and the strength of agreement with endoscopic diagnoses were used for statistical analysis. Results: At endoscopy 32 patients had esophagitis (ESO), 54 peptic ulcer (PU), 51 erosive gastritis (EG) and 69 had no lesions (NL). In patients with ESO, a significant association with abdominal pain (p=0.002), reflux syndrome (p<0.0001), indigestion syndrome (p=0.0004) and non-specific symptoms (p<0.0001) was observed; in patients with PU, a significant association with abdominal pain (p=0.02), bleeding (p<0.0001) and non-specific symtpoms (p<0.0001) was observed; in patients with EG, a significant association with abdominal pain (p=0.02), and non-specific symptoms (p=0.004) was observed. Logistic regression analysis demonstrated a significant association between ESO and abdominal pain (OR=6.9,95%CI=2.0-23.8), reflux syndrome (OR=15.3, 95%CI=3.2-72.4) and non-specific symptoms (OR=12.2, 95%CI=3.3-45.1) and between PU and abdominal pain (OR=18.8, 95%CI=4.0-88.2), bleeding (OR=50.3, 95%CI=9.8-259.0) and non-specific symptoms (OR=28.1, 95%CI=5.8-135.4). Using a p threshold value=0.50, 76.2% of subjects with ESO (sensitivity=37.5%, specificity=94.2%) and 69.9% of patients with PU (sensitivity=63%, specificity=75.4%) were correctly identified. Conclusions: UGISQUE is a feasible and reliable instrument for evaluating upper GI symptoms in the elderly.

P16.08 CLOSTRIDIUM DIFFICILE PROGNOSTIC CRITERIA. A. MICHAEL, A. BHANGU, G. FISHER, E. REES, M. LABIB *(Russells Hall Hospital, Department of Geriatric Medicine, Dudley, West Midlands, United Kingdom)*

Introduction: Studies showed high death rates among hospitalized patients with Clostridium difficile diarrhea. In this analysis we studied the haematological and biochemical markers of fatal disease with the aim of identifying poor prognostic factors. Methods: Retrospective analysis of patients with Clostridium difficile diarrhoea in a UK teaching hospital. 126 patients were randomly selected. Haematological and biochemical tests done on the third day of diarrhoea (+ / - one day) were reviewed. Statistics were made using non-parametric techniques. # Results: The mean age was 81 years. Mortality from Clostridium difficile was 45%. Patients who died were on average 2 years older, had higher median CRP (120 vs 46 p < 0.01), white cell counts (16.5 vs 11.0 p < 0.01), urea (11.6 vs 6.5 p < 0.01) and creatinine (97 vs 83.5 p < 0.05) and lower albumin (24 vs 27 p < 0.05).

Category	Mortality	Adjusted relative risk
CRP < 30	17.6 %	1.0 (ref)
CRP 30 to 90	36.8 %	2.1
CRP 90 to 140	52.6 %	2.98
CRP > 140	73.3 %	4.12
WBC < 20	33 %	1.0 (ref)
WBC > 20	88 %	2.6
Creatinine < 145	37.6 %	1.0 (ref)
Creatinine > 145	75 %	2.0

Conclusions: • Clostridium difficile patients who died had higher CRP, white cell counts, urea and creatinine, and lower albumin; • High CRP appears the single most

sensitive predictor of mortality, but a white cell count > 20 and a creatinine > 145double the predicted mortality. • The clinical significance of prognostic factors is to identify patients who need to be considered for early aggressive therapy. • The values obtained for relative risk should ideally be validated on a different sample of patients to confirm their reliability.

P16.09 AN ASSOCIATION BETWEEN A NON-INVASIVE, QUANTITATIVE ASSESSMENT OF LIVER FIBROSIS AND THE EFFICACY OF A PEGYLATED INTERFERON-ALPHA PLUS RIBAVIRIN COMBINATION TREATMENT FOR ELDERLY PATIENTS WITH CHRONIC HEPATITIS C VIRUS (HCV) INFECTION. E. OGAWA, N. FURUSYO, T. KOGA, Y. SAWAYAMA, J. HAYASHI *(Department of General Medicine, Kyushu University Hospital, Fukuoka, Japan)*

Objectives: The aim of this study was to investigate the association between a non-invasive, quantitative assessment of liver fibrosis and the efficacy of a pegylated interferon (PegIFN)-alpha plus ribavirin (RBV) combination treatment for elderly patients with chronic HCV infection. Methods: We prospectively studied 133 patients with chronic HCV infection (52 men and 81 women), who had continuous alanine aminotransferase abnormality, twice to five times the normal range, over a 12-month period. Of the patients, 114 received a 48 week PegIFN-alpha plus RBV treatment, and the remaining 19 were not treated. Transient elastography (FibroScan®) was done for each patient at baseline, week 48, week 96, and week 144 after enrollment: from April 2005 to December 2005. A sustained virological response (SVR) was defined as undetectable serum HCV RNA 24 weeks after the end of treatment. Results: The baseline mean values of FibroScan were 9.8 +/- 4.4 kPa, 9.4 +/- 5.5 kPa, and 7.6 +/- 3.9 kPa for SVR (n=50), non-SVR (n=64), and non-treated patients (n=19), respectively, with no significant difference among the patient groups. At week 48, the percentage change of FibroScan values were -13.3 %, -8.5 %, and 9.2 % for SVR, non-SVR, and non-treated patients, respectively, with significant improvement of the values for SVR patients in comparison to the untreated patients. At week 96, the values were -32.7 %, -3.2 %, and 27.6 % for SVR, non-SVR, and non-treated patients, respectively, with significant improvement of the values for the treated in comparison to the untreated patients. At week 144, the values were -43.9 %, 19.1 %, and 38.2 % for SVR, non-SVR, and non-treated patients, respectively, with significant improvement of the values for SVR patients in comparison to the other groups. Conclusions: Quantitative assessment using transient elastography indicated a progressively good clinical outcome for patients with successful virological treatment. Furthermore, the virological treatment itself may produce good results in terms of short-term anti-fibrosis of the liver in chronic HCV infected elderly patients

P16.10 GASTROESOPHAGEAL REFLUX DISEASE IN THE ELDERLY HYPERTENSIVE PATIENTS ADMINISTERED WITH ASPIRIN. M. OHISHI, T. TAKAGI, T. FUJISAWA, T. KATSUYA, H. RAKUGI *(Osaka University, Department of Geriatric Medicine, Suita, Japan)*

Objectives: Administration with lower dosage of aspirin as the secondary prevention for stroke is widely used in elderly hypertensive patients, and aspirin-induced ulcer (AIU) is one of the famous adverse events. AIU or Gastroesophageal reflux disease (GERD) in elderly patients did not usually show typical symptoms. Therefore we examined relationship of GERD, aspirin administration and symptoms using clinical questionnaires. Methods: One hundred and forty-six hypertensive patients (66.9±10.5 years old) were recruited. I classify objects into three groups; the elderly group (n=47, 65-74 years old), the very elderly group (n=41, more than 75 years old) and the young group (n=64, less than 64 years old). We evaluate clinical symptoms as acid countercurrent, stomachache, indigestion, diarrhea and constipation with GSRS, and diagnosed GERD by more than 4 in a QUEST questionnaire. Results: Lower dose aspirin was administered in 55 of 146. There is no difference between age and GERD frequency, but GERD is observed higher frequency in aspirin-administered patients (n=23, p=0.0168). The aspirin-administered frequencies and age showed positive association (p=0.0027), but there is no difference between digestive episode frequency and age. The constipation is shown higher frequency in aspirin-administered patients (p=0.0298), whole elderly patients (p=0.0139) and especially the elderly group (p=0.0345). The acid countercurrent, which was typical symptom of GERD, was shown only in aspirin-administered patients, but not with administration of aspirin in the elderly patients. Conclusions: As a further investigation was required, administration of aspirin might increase frequency of GERD with atypical symptoms in the elderly hypertensive patients.

P16.11 VALIDATION OF THE MULTIDIMENSIONAL PROGNOSTIC INDEX (MPI) FOR ONE-YEAR MORTALITY BASED ON A COMPREHENSIVE GERIATRIC ASSESSMENT: A PROSPECTIVE, MULTICENTER STUDY. A. PILOTTO[1], M. FRANCESCHI[1], L. FERRUCCI[2], F. RENGO[3], R. BERNABEI[4], G. LEANDRO[5] *(1. Department of Medical Sciences, Geriatric Unit, & Gerontology and Geriatrics Laboratory, San Giovanni Rotondo, Italy; 2. National Institute on Aging, Longitudinal Studies Section, Harbor Hospital Center, Baltimore, MD, USA; 3. Geriatric Department, University of Napoli, Italy; 4. Geriatric Department, Catholic University, Rome, Italy; 5. Biostatistics & Gastroenterology Unit, IRCCS Saverio De Bellis, Castellana Grotte, Italy)*

Aims: To validate the Multidimensional Prognostic Index (MPI) for 1-year mortality based on a Comprehensive Geriatric Assessment (CGA) routinely carried out in hospitalized elderly patients. Methods: Elderly patients consecutively admitted in 18 geriatric wards in Italy from February 01 to March 31,2006 were enrolled. A standardized CGA including ADL, IADL, SPMSQ, MNA, Exton-Smith scale, CIRS, drug use and social support network was used to calculate the MPI for one-year mortality. MPI was calculated from the aggregated total scores and expressed as a score from 0 to 1. Three grades of MPI were identified, i.e. low risk, range=0.0-0.33; moderate risk, range=0.34-0.66 and severe risk, range=0.67-1.0. Using the proportional hazard models we studied the predictive value of the MPI for all cause mortality over a 12-month follow-up. Results: 1145 hospitalized patients (M=505, F=640, mean age=81.6 ±7.3, range=65-102) were included. 393 patients were classified in the low-risk group (MPI-mean value=0.21±0.08), 572 patients in the moderate-risk group (MPI-mean value=0.52±0.09) and 180 patients in the severe-risk group (MPI-mean value=0.73±0.05). Higher MPI scores were significantly associated with older age (p=0.0001), female sex (p=.0001), and higher mortality (p=0.0001). A close agreement was found between the estimated and the observed mortality. Multivariable analysis, adjusted for age and sex, demonstrated that MPI was significantly associated with mortality at 30-days (OR=3.26, 95%CI=2.37-4.49, p=0.0001), 6-months (OR=2.61, 95%CI=2.06-3.31, p=0.0001) and 1-year (OR=2.62, 95%CI=2.10-3.27, p=0.0001) of follow-up. Conclusions: This MPI, calculated from information collected in a standardized CGA, accurately stratifies hospitalized elderly patients into groups at varying risk of mortality.

P16.12 VALIDATION OF A NEW QUESTIONNAIRE FOR THE EVALUATION OF UPPER GASTROINTESTINAL SYMPTOMS IN THE ELDERLY (UGISQUE). A. PILOTTO[1], M. FRANCESCHI, S. MAGGI[2], M. NOALE[2], G. PARISI[3], G. CREPALDI[2] *(1. Geriatric Unit, Department of Medical Sciences, IRCCS "Casa Sollievo della Sofferenza", San Giovanni Rotondo (FG), Italy; 2. Aging Section, National Research Council, Padova, Italy; 3. Internal Medicine Department, General Hospital, Feltre, Italy; 4. Gastroenterology Unit, University of Parma, Italy)*

Aims: To validate a questionnaire for evaluation of Upper GastroIntestinal Symptoms in Elderly patients (UGISQUE). Methods: We studied 206 consecutive elderly subjects (M=89,F=117, mean age=76.2, range=62–96 years) who underwent an upper GI endoscopy. The UGISQUE includes 15 items divided into five symptom clusters: A)abdominal pain (1.stomach ache/pain,2.hunger pain in stomach); B)reflux syndrome (3.heartburn,4.acid reflux); C)indigestion syndrome (5.nausea,6.rumbling in stomach,7.bloated stomach,8.burping); D)bleeding (9.haematemesis,10.melena), E)non-specific symptoms (11.anaemia,12.anorexia,13.weight loss,14.vomiting,15.dysphagia). Fisher test, logistic regression and K index to assess sensitivity, specificity and the strength of agreement with endoscopic diagnoses were used for statistical analysis. Results: At endoscopy 32 patients had esophagitis (ESO), 54 peptic ulcer (PU), 51 erosive gastritis (EG) and 69 had no lesions (NL). In patients with ESO, a significant association with abdominal pain (p=0.002), reflux syndrome (p<0.0001), indigestion syndrome (p=0.0004) and non-specific symptoms (p<0.0001) was observed; in patients with PU, a significant association with abdominal pain (p=0.02), bleeding (p<0.0001) and non-specific symtpoms (p<0.0001) was observed; in patients with EG, a significant association with abdominal pain (p=0.02), and non-specific symptoms (p=0.004) was observed. Logistic regression analysis demonstrated a significant association between ESO and abdominal pain (OR=6.9,95%CI=2.0-23.8), reflux syndrome (OR=15.3, 95%CI=3.2-72.4) and non-specific symptoms (OR=12.2, 95%CI=3.3-45.1) and between PU and abdominal pain (OR=18.8, 95%CI=4.0-88.2), bleeding (OR=50.3, 95%CI=9.8-259.0) and non-specific symptoms (OR=28.1, 95%CI=5.8-135.4). Using a p threshold value=0.50, 76.2% of subjects with ESO (sensitivity=37.5%, specificity=94.2%) and 69.9% of patients with PU (sensitivity=63%, specificity=75.4%) were correctly identified. Conclusions: UGISQUE is a feasible and reliable instrument for evaluating upper GI symptoms in the elderly.

P17 HEALTH SERVICES RESEARCH

P17.01 CHANGING ATTITUDES TO CARDIOPULMONARY RESUSCITATION IN OLDER PEOPLE: A 15 YEAR FOLLOW UP STUDY. P. EOIN COTTER, M. SIMON, C. QUINN, S.T. O'KEEFFE *(Galway Regional Hospitals, Department of Geriatric Medicine, Cork, Ireland)*

Background: while it is well established that individual patient preferences regarding CPR may change with time, the stability of population preferences, especially during periods of social and economic change, has received little attention. Objectives: to elicit the resuscitation preferences of older Irish inpatients, and to compare the results with an identical study conducted 15 years earlier. Methods: one hundred and fifty older medical inpatients awaiting discharge in a university teaching hospital or a district general hospital subjects were asked about resuscitation preferences. Results were compared to those elicited from a hundred subjects in 1992. Results: most patients (94%) felt it was a good idea for doctors to discuss CPR routinely with patients, compared with 39% in 1992. In their current health, 6% in 2007 and 76% in 1992 would refuse CPR. The independent predictors of refusal of CPR in current health on logistic regression were age and year of assessment. In the final model, those aged 75 to 84 years (OR 2.77 (95%CI 1.25-6.13), p=0.02) and 85 years or more (OR 15.19 (4.26-54.15), p<0.0001) were more likely than those aged 65 to 74 years (reference group) to refuse CPR. Those questioned in 2007 (OR 0.04 (0.02-0.81), p<0.0001) were less likely than those questioned in 1992 (reference group) to refuse CPR. Conclusions: there has been a significant shift in the attitudes of older Irish inpatients over 15 years towards favouring greater patient participation in decision making and an increased desire for resuscitation.

P17.02 SYSTEMATIC REVIEW OF TREATMENT FOR OLDER SUBSTANCE MISUSERS. I. MOY[2], P. CROME[1], I. CROME[3], M. FRISHER[4] *(1. Keele University Medical School (Courtyard Annexe), Keele, UK; 2. Keele University Medical School, Keele, UK; 3. Keele University Medical School (Harplands Campus), Keele, UK; 4. Keele University, UK)*

Objectives: To examine evidence for effective treatment for older substance misusers and outline appropriate treatments. Methods: PubMed, the Cochrane Library, MEDLINE, Project CORK and EMBASE were searched up to January 2007. Keywords included: elderly, older people, addiction, substance misuse, substance abuse, treatment, alcohol, nicotine, smoking cessation, prescription medications, benzodiazepines, illegal drugs, illicit drugs. The cut-off age was 50 years. The search produced 2500 abstracts, 50 of which were relevant. Trials were included if participants were over the age of 50, sample size was sufficient, follow-up was undertaken, baseline and outcome measures were reported, and pharmacological and psychological treatments for alcohol, nicotine, prescription medications or illicit drugs were investigated. Results: This is the first systematic review on this subject. 16 papers meeting inclusion criteria (alcohol combined with drug misuse [11]; methadone maintenance [1]; prescription drugs [1]; and smoking [3]) were examined systematically. 2 were carried out in the UK and 5 had a control group. Sample sizes ranged from 24 to 3,622 (mean = 704) and follow-up ranged from 1 month to 5 years (mean = 18 months). All studies had baseline and outcome measures, which varied. Outcome depended on self-report in 11 studies and most did not use biological measures or other corroboration. A range of psychological treatments was used. The overall conclusions indicate that older people do respond to treatment, do not achieve worse outcomes than their younger counterparts, and sometimes even do better. Conclusions: These preliminary results provide an optimistic foundation on which to base further UK research

P17.03 DO IRISH NURSING HOME PATIENTS FARE WORSE? K. DALY *(South East GP Training Scheme, Waterford Regional Hospital , Waterford City, Ireland)*

Objectives: To determine if differences exist between the quality of care a general practice gives to residents in nursing homes compared to their equivalents living in the community. Subjects: Patients over the age of 65 registered in a single general practice.41 being nursing home patients and 82 being matched controls for sex and age living in the community. Methods: Nine basic quality indicators were derived from recommended practice and the quality of care given to both groups analysed by Type 3 Analysis of Effects. Results: Significant differences were identified in 8/9 of the quality indicators. Nursing home patients were less likely to have their blood pressure checked in the previous twelve months 22/41(54%) vs. 76/80(95%).They were less likely to have adequate monitoring of chronic disease.If on statin,only 1/15 (7%)nursing home patients had cholesterol check in last year as opposed 30/35(86%) of the community based group. They were less likely to have formal medication reviews, 23/40(58%) vs 76/79(96%), less likely to be on beneficial drugs, aspirin only prescribed in 19/27(70%) where the indication existed vs. 41/45(91%).There was significant differences with regard to disease surveillance as measured by review post fall and MMSE measurements where appropriate. Conclusions: The quality of care provided by the general practice to its nursing home population was significantly different to the registered patients lived in their homes. This proportion of the Irish population is not represented in the medical literature. Efforts need to be made to address the inferior care that this proportion of the population receives.

P17.04 IMPROVING PSYCHIATRIC CARE OF OLDER MEDICAL INPATIENTS: ONE-YEAR EXPERIENCE WITH A SPECIAL INTEGRATED MEDICAL-PSYCHIATRIC UNIT. P. HUBER[1], H. HILLERET[2], P.-O. LANG[1], L. LE SAINT[2], C. CHAMOT[1], P. GIANNAKOPOULOS[2], G. GOLD[1] *(1. Department of Rehabilitation and Geriatrics, University Hospitals of Geneva, Switzerland; 2. Department of Psychiatry, University Hospitals of Geneva, Switzerland)*

Objectives: Psychiatric co-morbidity is common in geriatric patients hospitalized for somatic conditions, and is associated with an increase in adverse outcomes and a longer length of stay. In order to address this issue, we developed a special 8-bed medical-psychiatric unit in our Geriatrics Hospital. Methods: Admission criteria include the presence of a somatic disorder associated with an acute psychiatric disorder. Individuals with significant cognitive impairment or who require involuntary admission to a psychiatric institution are excluded. The geriatric multidisciplinary team is reinforced by two full-time nurses specialized in psychiatric care and a part-time senior psychiatrist. Geriatric and psychiatric multidisciplinary care is provided. This descriptive study evaluates the first year experience with this unit. Results: 79 patients were admitted in 2007. Mean (31.06) and median (27) length of stay in days were similar to that of other units. Forty-five patients returned home and 8 were admitted in a nursing home, 12 were transferred to a psychiatric unit, 7 to a long-term care unit and 4 to another unit. Three patients died. Most frequent psychiatric diagnoses included depressive disorders (45), substance-related disorders (10), anxiety disorders (8), bipolar disorders (4), and personality disorders (3). Conclusions: This first one-year evaluation indicates that this new unit is well integrated in our geriatric hospital setting. Early positive outcomes including the fact that the length of stay is comparable to other units are encouraging. However, further evaluation of this model of care is warranted before this approach can be generalised to multiple acute care settings.

P17.05 THE IMPACT OF GERIATRICIANS IN ACUTE MEDICAL UNITS – IMPROVING PATIENT CARE? K. LECKIE, H. BAYES, P. BIRSCHEL *(Southern General Hospital, Glasgow, Scotland, United Kingdom)*

Objectives: Recent years have seen an evaluation in acute medical services for elderly patients, with increasing integration of the Geriatrician into medical admission units (AMU). We aimed to evaluate the impact of a dedicated geriatric receiving team in an urban teaching hospital with a catchment population of 225,000. Methodology: Social, medical and demographic data was collected prospectively for all patient aged over 75-years admitted to our AMU over a 2-week period. Patients were followed-up over 2-months to ascertain outcome and access to rehabilitation services. Results: 274 patients were admitted to the AMU, with a one-third aged over 75-years. 78% of all appropriate elderly patients were seen directly by the acute Geriatrician. These patients had median of three co-morbidities (IQR: 2-4). 66% of patient had mobility problems identified at admission, with 83% of patients requiring formal or informal home care. 63% and 42% more elderly patients received physio- and occupational therapy, respectively, under the care of the geriatric team. Rehabilitation was commenced 2-3 days earlier than patients under the general physicians. Patients stayed a median of 5-days longer on geriatric compared with medical wards, with 7% of patients remaining as in-patients at 2-months. Conclusions: This study of our practice highlights the benefits of a dedicated acute geriatric team within a medical admissions unit. A considerable proportion of acute medical admissions were assessed directly by the acute Geriatrician. Rehabilitation needs were identified earlier and more frequently under the geriatric team, with potential benefits to outcome. Service development elsewhere should consider these findings.

P17.06 THE CULTURAL COMPETENCY CHALLENGE: GERIATRIC REHABILITATION STAFF PERCEPTIONS OF GROWING PATIENT DIVERSITY AT AARHUS UNIVERSITY HOSPITAL. B. LUNDGREN *(Aarhus University Hopsital, Geriatrics Department, Aarhus, Denmark)*

Objectives: Collecting cross-disciplinary health care staff and management accounts of sense-making about, and strategies for, providing culturally competent care for ethnic minority rehabilitation patients to design an educational intervention. That is perceptions of ethnic minority patients' difference and the resulting care strategies. Methods: 16 cross-disciplinary staff participated in focus groups while 6 management and key persons participated in individual semi-structured interviews between November 2007 and February 2008. Participation was voluntary. A multi-componential framework for the construction of competence was used for data analysis with emphasis on factors like the situated self, discourses/communication resources, expectations, group sense-making and strategy. Findings: Both groups drew on dominant discourses about parallel societies and racism anxiety to evaluate their own and others' competency. Staff juxtaposed the discourses with expectations about developing "the good rehabilitation process", "the good rehabilitation patient" and "the good ethnic minority". The tensions between the two discourse sets appeared to create anxiety about navigating the dynamics of similarity/difference in patient health perceptions and expectations. Managers juxtaposed the discourses with expectations of tolerance and patient-centered care with focus on human universals. This appeared to produce dissatisfaction with turnover and disrupted knowledge sharing. Both groups reported stress and extended rehabilitation processes. Conclusions: Practitioner-patient culture and language barriers can undermine the quality and accessibility of care and drain resources. The accounts of clinical interactions demonstrate a need for greater awareness of rehabilitation norms, general knowledge about diversity in patient health perceptions/preferences and tools to overcome language barriers and tackle possible racism amongst staff and patients.

P17.07 EVALUATING PATIENTS' PERSPECTIVES ON RECEIVING A COPY OF THEIR GENERAL PRACTITIONERS LETTER FROM THEIR HOSPITAL CONSULTANT. B. MC ENIRY, I. PILLAY *(South Tipperary General Hospital, Ireland)*

Sending copies of General Practitioners (GPs) letters to patients is not new. As a team in Geriatric and General Internal Medicine, we asked patients for feedback on how they felt about receiving copies of their GPs letters, which were sent to them, during a pilot programme. We randomly selected 400 patients out of 2,000 who received a letter during the programme, to receive a questionnaire. 32% (n=130) responded. Two thirds of respondents were over the age of 65 years. The ratio of male to female respondents was 1:1. The majority of patients (90%) found receiving a copy of their GPs letter useful. Most (70%) found it reassuring although a few (4%) were frightened by the letter. Most patients (85%) asked to continue receiving information in this way. These results are generalisable to most secondary referral hospital adult medical departments. There was a perception prior to these letters being sent, that older patients would find these letters frightening, which was not borne out by the survey. From a healthcare system and corporate governance perspective, the potential advantage of communicating directly with patients includes improving health education and promotion. Other advantages include patients picking up on errors within their letters, following up on further test appointments or referrals to other specialists and giving pertinent information to others involved in their care. We would suggest that all adult patients, including the elderly, who access our hospital system, should be given the option to receive a copy of their GPs letter.

P17.08 SUBACUTE GERIATRIC ASSESMENT UNIT (GAU) AS AN ALTERNATIVE TO ACUTE ADMISSION OF GERIATRIC PATIENTS. L. E.MATZEN *(Odense Universityhospital, Department of Geriatric Medicine, Odense, Denmark)*

Introduction: In marts 2007 we opened a GAU with the purpose of converting acute admissions during evening and night to planned assessment within 24 hours in the outpatient clinic. Before using the GAU offering, the doctors on call had to discuss it with the referring general practitioners (GP). Methods: The number of acute patients admitted to the geriatric wards and the number of acute admissions converted to subacute assessment in the outpatient clinic were registered prospectively during 10 months (01.03.2007 – 31.12.2007). Results: In the study period 1680 were referred as acute patients. Among these 348 (21%) were converted from acute admissions to the wards to subacute assessments in the GAU within 24 hours. The number of men and women were 123 (38%) and 215 (62%) and the age (mean, SD) 81,8 ± 7,6 years and 82,3 ± 9,0 years (ns). Of the 348 subacute patients seen in the GAU 143 (41%) were planned for further treatment in the outpatient clinic, 20 (6%) were terminated and 178 (51%) were admitted to the geriatric wards. Conclusions: The GP´s were willing to discuss admissions and to make use of the GAU. The GAU cut 170 acute admissions. With an average length of stay in the study period of 10,3 days this equals a saving of 5,6 beds.

P17.09 DRIVING, TRANSPORT AND OLDER PEOPLE. D. O'NEILL[1], R. GARAVAN[2], A. O'HANLON[2], H. MCGEE[2] *(1. Adelaide and Meath Hospital, Dublin, Ireland; 2. Royal College of Surgeons, Dublin, Ireland)*

Background: Driving is the most prominent form of outdoors mobility, and access to driving is an important component of social inclusion at all ages. Older people are more vulnerable than other age-groups to reduced access to driving, and the associations between health, behaviour and continued driving are still not fully understood, not only for those who cease driving, but also for those who have never driven. Methods: Participants, from the a cross-sectional study (HARP) associated with the first Irish longitudinal study on ageing (HESSOP-2), were 2,033 randomly selected community-dwelling older (+65 yrs) Irish adults, completed questions about driving alongside measures of physical and psychological health, strategic methodology. Results: Fifty-six percent of the sample (n = 1,148) reported not driving a car, and 37% (n = 740) had never learnt to drive. Both never driving and being a former driver was associated with being a woman, older, higher socioeconomic status, greater difficulty in attending outdoor activities (more than 3 times more likely to report difficulty attending events outside the home), greater ill-health, and greater use of transport provided by friends and relatives. Public transport was only slightly more commonly used by those who did not drive. Conclusions: This study underlines the complex nature of the associations between health and transportation, and the fact that driving cessation and the fact of never having driven that is associated with more ill-health and social exclusion. Transportation policy needs to develop more flexible and client-friendly transport options for this more vulnerable group of older people.

P17.10 CARE PROBLEMS OF ELDERLY AND BURNOUT LEVELS OF NURSES IN NURSING HOMES AND GERIATRIC CARE REHABILITATION CENTERS IN TURKEY. N. AKDEMIR, S. KAPUCU, L. OZDEMIR, Y. AKKUS, G. BALCI, I. AKYAR *(Hacettepe University, Ankara, Turkey)*

Objectives: The aim was to determine the status of nursing homes and geriatric care rehabilitation centres and care problems of elderly and to examine the burnout levels of nurses. Methods: This study was designed as a descriptive study including 158 nursing homes and geriatric care rehabilitation centres in Turkey. Data were collected by interview in big cities; in other cities by fax, and mail. Sample of the study included 101 nursing homes. â€œDetermining Care Problems of Elderly Care Organizationsâ€□and â€œMaslach Burnout Inventoryâ€□were used as data collection tools. Results: The results indicated that of nursing homes 56.3% were in Ankara, Istanbul and Izmir, range from deficiencies in equipments were such as 97.9% were chargeable cars, therapy pools were 95.9%, of the caring group 67% were semi-dependent and 59.8% were dependent. At the nursing homes, particularly 89.7% had not got care assistants, of the care personnel 78.8% do not have an in-service training of elderly care, and most of the nursing home personnelâ€™s emotional burnout and desensitisation levels were high, whereas individual success levels were low regarding Maslach Burnout Inventory. Furthermore, Burnout levels of the nurses who were not satisfied with working in nursing home, do not feel fit to occupation and having care, communication and team troubles while working with elderly were higher than others. The burnout level of those who were satisfied with working at nursing home were low ($p<0.05$). Conclusions: Nurses should have in-service training education and nursing homes should be supported as physical and technical equipments.

P17.11 PREDICTORS OF HOSPITALIZATION IN NURSING HOME RESIDENTS: THE ULISSE PROJECT. F. PATACCHINI[1], C. RUGGIERO[1], G. DELL'AQUILA[1], R. FERRETTI[1], T. MARIANI[1], R. GUGLIOTTA[1], E. CIRINEI[1], B. GASPERINI[1], F. LATTANZIO[2], R. BERNABEI[2], U. SENIN[1], C. CHERUBINI[1] *(1. University of Perugia, Italy; 2. Catholic University, Rome, Italy)*

Objectives: Hospitalization is associated with higher risk of adverse events especially in older persons living in a Nursing-home (NH). There are few studies concerning the predictors of hospitalization in N-H residents. The aim of this study is to identify those predictors in a population of NH Italian residents. Methods: Data were collected on 1,762 N-H residents enrolled in the ULISSE project, an observational multicentric study performed in 31 Italian NHs. Baseline data were collected using a comprehensive geriatric assessment based on the Minimum Data Set. Characteristics of residents, staff and N-Hs were assessed using specific questionnaires. Hospitalizations were considered at six month follow-up. Multivariate logistic analyses were performed to estimate the independent predictors of hospitalization. Results: 1,386 N-H residents had complete 6-month follow-up. Six month hospitalization rate was 8.7%. Residents admitted to the hospital were more likely to be women, had higher number of diseases, number of drugs and more severe comorbidity compared to those who were not admitted. The risk of hospitalization tended to increase with age. Independent of confounders, residents aged 85 years and more and those affected by severe comorbidity (CIRS >5) had 2.4 and 2.5 higher probability to be hospitalized, respectively; while those with moderate cognitive impairment (CPS >2) had significant lower probability. A greater availability of physicians in the NH significantly protects against hospitalization. Conclusions: Hospitalization risk among N-H residents depends on intrinsic factors, such as age, comorbidity, number of drugs and diseases, dementia, and extrinsic factors, such as availability of physicians.

P17.12 CAN TELEPHONE INTERVIEW WITH GERIATRIC PATIENTS AFTER DISCHARGE PREVENT READMISSION? T. SANDER PEDERSEN, K.N. RAUN, E. JESPERSEN *(Herlev University Hospital, Copenhagen, Denmark)*

Background: Geriatric patients are fragile and at risk of readmission after discharge from hospital. Material: 60 geriatric patinets discharged in a period of 3 months. We compared with 60 geriatric patients discharged 1 year earlier. Aims: To analyse if telephoning interview after discharge is accepted by geriatric patients and can prevent readmission - especially 'inappropriate' readmissions? Methods: All 60 geriatric patients were offered an interview by tlephone performed by an experienced geriatric nurse within the first week after discharge. Criteria of succes: >75% of the patients should accept a telephone call after discharge >75% of the patients telephoned should ewperience this as a good initiative <10% of the patients were readmitted to hospital within the first month >90% of the readmitted patients had diagnosis that met criteria from the Appropriate Evaluation Protocol (AEP-criteria) Results: All asked patients accepted to be called by telephone 46 patients (76,7%) found it a very good iniatiative - 1 dit not (1,7%), and 13 (21,7%) were not able to answer 12 Patients (20%) were readmitted to hospital withn the first month 11 (92%) of readmitted fulfilled the AEP-criteria In the same period 1 year earlier 17/60 patients (28,3%) were readmitted within the first month, and 11/17 (64,7%) of readmissions fulfilled the AEP-criteria. Conclusions: Tlephone interview with geriatric patients after discharge is well accepted by the patients and might prevent especially inappropriate readmissions.

P17.13 HOW TO WORK WITH QUALITY IN GERIATRIC CARE? E. SIXT *(Sahlgrenska University Hospital, Göteborg, Sweden)*

The department of Geriatrics at Sahlgrenska University Hospital, Göteborg, Sweden, has 127 beds and 340 employees. For our quality work we have chosen problem areas frequent in elderly patients like nutrition, confusion, pain, urinary incontinence, skin and ulcers, and drug treatment. Within these prioritised areas we have constituted strategic and executive groups. The strategic groups consist of members of staff representing different professions and called in members. The assignment for the groups is improving the process, make up guidelines, choose quality indicators and make up educational strategies. The executive groups consist of two nurses from each unit to implement new routines, to improve the process, to distribute information, to educate the personnel, to make quality insurance and to report to the strategic group. The quality indicators are reported in Balanced Scorecard. Staff taking part of the strategic and executive groups is entitled to education in the prioritised area. Within patient safety we work in a similar way with a strategic group and an executive group within the defined risk areas like falls and accidents, drug treatment and adverse events, communication and information, infection during care, mistakes and misjudgements, mix-ups and forgetfulness. This model for quality and patient safety ensure a high standard of caretaking and high competence of the staff.

P17.14 TWO YEAR NURSING HOME PLACEMENT RISK USING THE ELDERLY AT RISK (EAR) POPULATION PREDICTOR MODEL. P. TAKAHASHI, S. CRANE, E. TUNG, A. CHANDRA, A. YU-BALLARD, G. HANSON *(Mayo ClinicDepartment of Medicine, Rochester, MN, USA)*

Introduction: Providers strive to identify predictors of nursing home (NH) placement in frail older adults. The use of an administrative model derived from electronic data appeals to many based upon speed and cost. Aims: To determine the association between Elderly at Risk (EAR) score and 2- year nursing home placement. Methods: The authors performed a cohort study of all patients within a primary care practice on January 1st 2005. A blinded administrative technician scored each person using an administrative data model (EAR index). This index utilizes weighted information (demographics, prior hospitalizations, and comorbid illnesses) to develop an individual's score. Each subject was divided into groups with the top 10% representing elders at risk. Data analysis involved logistic regression for NH placement within 2 years. Results: There were 12, 650 patients with scores from -7 to over 16. The average age in the top 10% by score (n=1186) was 80.7 yrs +/- 8.4 yrs compared to 65.0 yrs +/- 4.3 yrs in the bottom 15%(n=2106) ($p<0.001$). All comorbid conditions had significantly higher proportions in the highest 10% compared to the lowest group. Two year NH admission percentage was 1% in the lowest group to over 59% in the top 10% which yielded a relative risk of 113.2 [95% CI 76.1-168.4]. Discussion: Older adults with higher EAR model scores had 113 fold higher risk of nursing home placement in 2 years. The application of this model could focus

preventive interventions toward patients at highest risk for institutionalization.

P17.15 SYSTEMATIC PROBLEM IDENTIFICATION ADDS INFORMATION TO THE ADMISSION REASON IN A GERIATRIC DAY HOSPITAL. A. VELGHE[1], J. PETERMANS[2], D. GILLAIN[2], N. VAN DEN NOORTGATE[1] *(1. University Hospital Ghent, Belgium; 2. University Hospital Liege, Belgium)*

Aims: To evaluate the correlation between the reason(s) for referral to the geriatric day hospital and problems identified by the RAI screener. Methods: The study was carried out in 48 Belgian geriatric day hospitals. Over a 3-month period , following variables were registered : patient demographics, activities performed (diagnosis, assessment, therapy, revalidation) and assessment instruments used. The RAI screener was used to assess common problems in the elderly. Results: Memory(39.6%) or mood (9.2%) disturbances, falls (11%) and mobility problems (12.3%) were the main reasons for admission. Frailty (8.5%), malnutrition or weight loss (7.2%), pain (6.8%) and urinary incontinence (4.7%) seemed less frequent a reason for referral. Forty four percent of patients mentioned short-term memory problems. At least 25% showed signs of mood disturbances on at least 1 occasion during the last 3 days. Overall, 22.2% fell at least once and 25 patients fell 9 times or more. Almost 60% mentioned unintentional weight loss. Twenty two percent had incontinence problems. Thirty four percent were in pain every day and 28% indicated times when their pain was excruciating. Conclusions: A good correlation between the reason for admission and the problem identification by the RAI screener is observed for short memory disturbances and falls or mobility problems. Unintentional weight loss, urinary incontinence and pain, although important geriatric syndromes, seem to lack interest by the current geriatricians and general practitioners. Furthermore these additional problems identified by the RAI screener seem to be no reason for further assessment during the 3 months following first admission.

P17.16 PREVENTING ACUTE HOSPITALIZATION THROUGH NEWLY DEVELOPED COOPERATIVE SCHEMES BETWEEN HEALTH CARE SECTORS. S. VAN DER MARK[1], H. PETERSEN[2], B. SEJTVED[2], R. MELTON[2] *(1. Gentofte University Hospital, Hellerup, Denmark; 2. Municipality of Lyngby-Tårbæk, Denmark)*

Objectives: To prevent acute hospitalization of elderly citizens living on their own and create individual assessment plans. Procedure: In the past year, the municipality of Lyngby-Tårbæk with its 10,000 >+65 inhabitants and nearby Gentofte University Hospital developed a new cooperative health service scheme. When citizens needed acute hospitalization, their G.P. contacted the team consisting of a geriatric senior consultant and a specialized primary-care nurse with the authority to make acute referrals on behalf of the citizen's municipality. The family was also invited to participate in this visit. Visits were paid within 24 hours to 94% of cases. Acute hospitalization is not always a result of acute illness, is often traumatic for the elderly patient and can lead to functional decline. Reasons for referral to our project: acute illness, delirium/dementia, functional decline, falls, emaciation, pain, social incompetence. Population: 18 men and 60 women, mean age 85. Interventions were numerous: acute hospital admission (6%), elective hospital admission (5%), outpatient clinic (47%), increased home-care (54%), home visits by nurses including dispensing of medicine (19%), meals on wheels (13%), mobility appliances (24%), acute institutionalized rehabilitation (12%), physiotherapy at home (14%), intermediate care (3%), day care centre (9%). All patients received interventions. Conclusions: Acute hospital admission can be prevented by targeted municipal and medical efforts in the patient's home. All visited were potential candidates for acute admission, but only 6% were actually hospitalized. The effect of this programme was long lasting - 80 % were not hospitalized during following three months for the same ailments.

P17.17 THE FIRST SIX MONTHS OF HOME CARE SUPPORT TEAM IN BARBASTRO. A. ZAMORA MUR[1], A. ZAMORA CATEVILLA[2], L. ALONSO BOIX[1], P. JORDÁ[1], E. GONZÁLEZ[1], J. FLORIAN[2], P. BUESO[2] *(1. Hospital San Juan de Dios de Zaragoza, Spain ; 2. Hospital de Barbastro, Spain)*

Objectives: to study characteristics and symptoms in patients attends to Home Care Support Team (HCST) over the six first month of activity. Methods: descriptive prospective study. Measurements: age, sex, patient's origin, Barthel index previous, Barthel index first day attention, Pfeiffer test, Karnofsky index, chase time, number of visits, Global Deteriorate Scale(GDS), principal caregiver, principal symptoms, pain analogical scale (PAS), NYHA, number of drug in first day attention. Results: N=100, mean age 76´5 years, 45% women, origin: primary care team 37%, hospitality specialities 44%, others 19%; mean Barthel previous 69´5, mean Barthel first attention 41´5, mean Pfeiffer four mistakes, dementia in 30%, mean GDS 6 (Alzheimer 34´5%, vascular 27´6%, other 37´9%), palliative attention to 62%, symptoms at first visit: pain 38% (mean PAS 6), dyspnea 27% (mean NYHA 2´7), anorexia 51%, anxiety 31%, depressive syndrome 30%, behavioural symptoms/agitation 25%, nausea 16%; mean follow-up time 41 days, mean number of visit in this time 3.Mean Karnofsky 49. The average number of drug in first day attention was seven. Principal caregiver: nobody 4%, couple 30%, son/daughter 26%, nursing home 22%, other 18%. Conclusions: 1.Principal origin of the patients by hospitality specialities. 2.Several dependence and low percentage of symptoms in the first day attention, except anorexia. 3.Significant poly-pharmacy in the patients at first visit.

P18 INCONTINENCE

P18.01 SIX-YEAR FOLLOW-UP AND PREDICTORS OF URGENCY URINARY INCONTINENCE AND BOWEL SYMPTOMS AMONG THE OLDEST OLD. M. NUOTIO[1], T. LUUKKAALA[2,3], T.L.J. TAMMELA[4], M. JYLHÄ[3,5] *(1. Seinäjoki Central Hospital, Geriatric Unit, Finland; 2. Science Center, Pirkanmaa Hospital District, Finland; 3. Tampere School of Public Health, University of Tampere, Finland; 4. Department of Urology, Tampere University Hospital and University of Tampere, Finland; 5. Institute for Social Research, University of Tampere, Finland)*

Objectives: To examine the associations of urgency urinary and faecal incontinence and constipation with six-year mortality and predictors of incident symptoms among the survivors. Methods: A population-based survey involving 398 people (173 men and 225 women)aged 70 years and over at baseline. The 252 survivors (104 men and 148 women) were re-interviewed six years later. Cox proprotional hazards models with hazard ratios (HR) and 95 % confidence intervals (CI) were used to examine the associations of the symptoms with total mortality and logistic regression models with odds ratios (OR) to identify predictors of incident symptoms among the survivors. Age, gender, comorbidity, depressive mood, activities of daily living (ADL), instrumental activities of daily living (IADL), and mobility disability were the covariates. Results: Frequently reported urgency urinary (HR 2.23;95 % CI 1.37-3.61) and frequently reported faecal (HR 4.99; 95 % CI 2.11-11.79) incontinence were associated with mortality when adjusted for age and gender only. In the multivariate analyses, comorbidity (OR 5.54;95 % CI 1.52-15.14), depressive mood (OR 5.78;95 % CI 1.35-24.79) and IADL disability (OR 4.18;95 % CI 1.52-11.50) predicted urgency urinary incontinence. Comorbidity (OR 2.91;95 % CI 1.09-7.77) predicted incident faecal incontinence. Conclusions: Comorbidities and disabilities explain the association of severe urinary and faecal incontinence with mortality. Comorbidity predicts urinary and faecal incontinence. Urgency urinary incontinence is additionally predicted by depressive mood and IADL disability. Constipation does not predict mortality and no predictors for incident constipation were identified when it was examined as a symptom in itself.

P18.02 USEFULNESS OF A SPECIFIC QUESTTIONNAIRE (ICIQ-SF SPANISH VERSION) TO DETECT AND CHARACTERIZE URINARY INCONTINENCE IN PRIMARY CARE. M.P. DE ANTONIO GARCÍA[1], P. GÓMEZ DE ABIA[1], A. ALLUE BERGUA[1], M. CABRERA OROZCO[1], M. CARPENA RUIZ[2], C. VERDEJO-BRAVO[3] *(1. Centro de Salud 'Colmenar Viejo Norte'. Madrid. Spain; 2. Hospital Universitario Ramón y Cajal. Madrid. Spain; 3. Hospital Clínico San Carlos. Madrid, Spain)*

Objectives: to assess the value of a specific urinary incontinence questionnaire to detect and characterize the loss of urinary continence in a sample of older patients in a primary care setting. Methods: cross-sectional study of all subjects older than 64 years who attended for any reason a Primary Care centre during a three months period. They were asked to fill a standardized questionnaire (ICIQ-SF, Spanish version) with four questions that assess level of symptoms, perceived cause and perceived impact on quality of life (Qol). Results: Sample: 307 (186 females), mean age 77.4±6.9 years. 210 subjects (68.4%) reported loss of urinary continence, more frequently females ($p<0.001$). Frequency of leakages: 36.7% reported them several times a day, 28.1% reported weekly losses. The amount was considered very small by 75.2%, and moderate by 19%. Clinical type: incontinence at cough: 69.5%; urge incontinence 41%. Impact on Quality on Life:a median of 4 out of 10. The impact was higher impact with stress incontinence ($p<0.001$); at the end of the micturition ($p<0.001$) and with persistent leakages ($p<0.001$). The impact of incontinence grew with age. Conclusions: The ICIQ-SF (Spanish version) is a useful tool to detect and characterize the loss of continence in Primary Care settings. The impact of urinary incontinence in our sample was considered as moderate, and grew with age.

P19 INFLAMMATION

P19.01 POTENTIAL UTILITY OF INFLAMMATORY MARKERS IN PREDICTING FUNCTIONAL DECLINE IN HOSPITALIZED AGED PATIENTS. M. DE SAINT-HUBERT, C. DIVOY, D. SCHOEVAERDTS, C. SWINE *(Cliniques Universitaires de Mont-Godinne, UCL, Yvoir, Belgium)*

Objectives: to study the clinical significance of inflammatory markers in predicting functional decline in hospitalized elderly, as compared with clinical score. Methods: a prospective cohort study on 108 patients aged 75 and older admitted for one of three acute conditions (hip fracture, infection, decompensed heart failure). SHERPA, a clinical score (age, fall, self-rated health, iADL, MMSE), Il-6, CRP, D-Dimers were measured at admission. ADL were reassessed three months after discharge. An increase of one point in the ADL score or death was defined as a functional decline (FD). Results: Mean age was 82.5+/-5.4 years (64% of female). At three months, 61 (57.4%) patients declined (of whom 22 death). SHERPA (0-11.5) was significantly different between decliners and non-decliners (4.7+/-2.7 vs 7.4+/-2.51, $p<0.0001$), even in subgroups analysis. Il-6 and D-Dimers also significantly differ from decliners to non-decliners (respectively 93.2+/-90.2 vs 145.0+/-137.0, $p=0.033$, and 1732.9+/-1234.7 vs 2376.0+/-1848.7, $p=0.046$). Il-6 remains significantly different only in decompensed heart failure. No other biological value reaches the significance level. Discussion: Functional decline frequently occurs following hospitalization in aged patients. Several tools, using clinical items have been designed to predict it, but few includes biological parameters. However, in community-

dwelling patients, longitudinal studies showed that inflammatory parameters predict various adverse health events. Our first results tend to support the hypothesis that inflammatory response to acute stress during hospitalization is different between decliners and non decliners. This may help to detect at-risk patients. Further studies and analyses are needed to confirm the clinical utility of biological predictors of FD.

P19.02 PROCALCITONIN: BIOMARKER TO DETECT SEVERITY OF COMMUNITY ACQUIRED PNEUMONIA – A PILOT WITH GERIATRIC PATIENTS. H.J. HEPPNER[1], C. SIEBER[1], T. BERTSCH[2] *(1. University Nürnberg-Erlangen, Chair Internal Medicine Geriatrics, Germany; 2. Institute für Klinische Chemie und Laboratoriumsmedizin, Klinikum Nürnberg, Germany)*

Aims: Procalcitonin as a sensible biomarker for inflammation should be able to detect the severity of common acquired pneumonia (CAP) certain and should give a prognosis for the further clinical trend. Background: CAP appears with a frequency of about 800.000 a year in Germany. Pneumonia is often cause of serve sepsis or septic shock. Starting point of the clinical consideration was the use of Procalcitonin for risk evaluation and severity appointment in geriatric patients. Methods: The observation study was performed in an university hospital and all patients 70 years and older, admitted consecutively to the acute geriatric ward, with CAP were included. CURB 65 as a CAP-score and Mini Mental Status and Barthel Index as geriatric specific assessment were documented. Also Procalcitonin was measured on admission and at day 1, day 2 and day 3, including inflammatory parameters like leukocytes and C-reactive protein. All those findings were correlated to get evidence of severity or mortality. Conclusions: Procalcitonin is a sensible biomarker for inflammation. The initial value does not permit an outlook on severity. Also leukocyte count and C-reactive protein are not able to give prognosis on mortality. The dynamic developing of Procalcitonin over the time seems to be a safe predictor for severity of CAP and the risk of mortality in geriatric patients.

P20 INTENSIVE CARE

P20.01 INVASIVE MYCOSIS IN THE ELDERLY - AN APPRAISAL ON A GERIATRIC INTENSIVE CARE UNIT. H.J. HEPPNER, C. SIEBER *(University Nürnberg-Erlangen, Chair Internal Medicine Geriatrics, Germany)*

With stratifying the risk of invasive mycosis in critically ill elderly in an intensive care unit will have less complications. The incidence of mycosis is still rising. Noticeable is the increase of infections with Aspergillus fumigatus in the older patient group. Retrospective analysis of 6254 clinical records the see the effects of antimycotical therapy in different regimes. The total number of isolates was detected, microbiological nature, and infection were specified and therapy were well-defined. The attention was directed on patients who suffered from an infection with Aspergillus fumigatus combined with severe septic shock. During the observation period in 89 patients older than 65 years were 252 isolates found. Separated in age-clusters 47% (n=42) were 65-75 years old, 29% (n=26) 76-85 years and 24% (n=21) in the age over 85. Yeast fungus were most frequently. Leading Candida albicans with 155 verifications, c.glabrata, 20 isolates c.tropicalis, 4 isolates c.kruseii and 4 isolates c.guilliermondii. Aspergillus fumigatus was labratory-confirmed in 17 isolates in 14 patients. 5 of these wer female, 9 male. 12 patients fullfield the criteria of septic shock in the run-up of treatment. An increasing number of detecting Aspergillus fumigatus was found, especially in the patients over the age of 80. It was well-demonstrated that geriatric patients, being treated evidence based in an intensive care unit because of sepsis, are on high risk to suffer from an invasive mycosis. With early risk identification and, as a result, an risk-adapted therapy we are able to reduce this severe complication in its frequency.

P20.02 MANAGEMENT OF NUTRITION ON A GERIATRIC INTENSIVE CARE UNIT. H. J. HEPPNER, C. SIEBER *(University Nürnberg-Erlangen, Chair Internal Medicine Geriatrics, Germany)*

Geriatric patients with their age depended functional decline and multimorbidity are threatened by malnourishment due serve illness and there is a special risk during intensive care treatment. Critically ill patients do not have a balanced metabolism and multimorbidity causes increased energy consumption. Also the ability to regulate food intake declines at advanced age. Most elderly patients admitted to our ICU showed physical signs of malnutrition like lower anthropometric values. Therefore nutrition is an important part of the therapeutic concept. Initial most critically ill patients tolerate only small volumes of enteral feeding so the combination of parenterale and enteral nutrition is necessary. Malnutrition on ICU has different reasons. Mechanically ventilated patients are on higher risk of enteral underfeeding than non ventilated. In over 70% of the cases they get only two-third of the energy intake they need. In the acute phase the loss of functional proteins and muscle mass and a low level of serumalbumine describe a high risk for nosokomial infections and weaning problems. Enteral feeding should start within the first 12 to 24 hours to preserve intestinal mucosal integrity and avoid bacterial translocation, to keep the gut on duty and give the patients the energy they need. Adapted to the different metabolic phases in critically ill nutrition concepts are important for our geriatric patients on intensive care units.

P20.03 MODERN PRACTICE IN VENTILATION IN INTENSIVE CARE MEDICINE WITH GERIATRIC PATIENTS. H.J. HEPPNER, C. SIEBER *(University Nürnberg-Erlangen, Chair Internal Medicine Geriatrics, Germany)*

Geriatric patients are more and more admitted to intensive care units. The increase of chronic diseases and medical improvement leads to more older patients participating in modern treatment tools in intensive care medicine. This is also aimed to the part of mechanical ventilation. For appropriate oxygen saturation functioning of the breathing patterns, faultless pulmonary parenchyma and sufficient oxygen carrying is important; that means ventilation, diffusion and perfusion must work in physiological ranges. Within ICU therapy it is often necessary to work out the required respiratory excursion by mechanical ventilation. Especially for hypercapnic acute respiratory insufficiency within AECOPD non-invasive ventilation seems to be prove of value in geriatric patients. Data from clinical observation show that mortality significant decreased, endotracheal intubation was less required and weaning problems are more rare. Severe complications and length of stay on intensive care units were reduced. Therefore non-invasive ventilation is a successful alternative for intensive care units treating especially geriatric patients with acute respiratory insufficiency.

P21 MOVEMENT DISORDERS

P21.01 POST HOSPITALISATION INSTITUTIONALISATION. A. MICHAEL *(Russells Hall Hospital, Department of Geriatric Medicine, Dudley, West Midlands, United Kingdom)*

Introduction: Patients with Parkinsonism may be admitted to hospital because of poor disease control, complications related to Parkinsonism or its treatment, or reasons unrelated to PD. This has considerable implications. The aim of the study was to identify where do admitted patients with Parkinsonism come from and their discharge destination. Methods: Prospective observational study. Consecutive patients with Parkinsonism admitted, for any reason, to an UK General Hospital in a 15 months period were studied. Patients in the psychiatric unit were excluded. Patients were reviewed and the notes and the electronic data base were studied. Patients were followed up till discharge. Data were downloaded on SPSS and descriptive statistics were used. Results: The study included 107patients who were admitted 133 times. Mean age was 79.4years (range52–95years). There were 84 male (63%) and 49 female (37%) admissions. 129 admissions (97%) were emergency and 4 (3%) were elective. 9 admissions (7%) were clearly related to Parkinsonism, 52 (40%) were unrelated, and 72 (54%) were due to causes that could be related to Parkinsonism. 91 patients (68%) came from home, however 50 (38%) were discharged to home. 21 patients (16%) came from nursing homes, and 30 (23%) were discharged to nursing homes. 16 patients (12%) came from residential homes, and 18 (14%) were discharged to residential homes. 4 (3%) came from warden controlled accommodations, and 2 (2%) were discharged to warden controlled accommodations. The average duration of rehabilitation for patients with Parkinsonism (19.3days) was more than double that of hospitalised patients. 105 patients (79%) were discharged alive, however 28 (21%) died during hospitalization. Conclusions: • Hospitalisation of patients with Parkinsonism may be a "life changing" event heralding institutionalization or upgrading previous category of care. • Services need to be implemented to aim at better disease control, early recognition of complications, prevention of crisis situations, prolonging independency and avoidance of hospital admissions.

P21.02 PHYSICAL REHABILITATION IN A PATIENT AFFECTED BY PARKINSON'S DISEASE. R. SCOYNI[1], I. TRANI[2], C. SCHIAFFINI[1], B. FELLI[1], L. AIELLO[1], P. BELLI[1], M.T. PACITTI[3], A. MORELLI[1], M. D'IMPERIO[1], A. FALANGA[3], D. CARRATELLI[3], M. MOROCUTTI[4] *(1. Casa di Cura, Italy; 2. ASL RMH, Italy; 3. ASL RME UOC Neurologia Opedale Santo Spirito, Italy; 4. Università di Roma Dipartimento di Neurologia, Italy)*

Parkinson's disease (PD) is a common neurodegenerative disease in elderly people that causes progressive functional loss and disability. In PD patients immobility, as in long hospital stays, reduces muscle trophism and affects functionality. We preset the case of a 79 year-old man affected by PD admitted to our clinic coming from a roman Hospital in bad general conditions with a diagnosis of "neuroleptic intoxication, severe cognitive impairment, behavioural disturbances". At admittance he showed signs of dehydratation, had severe hear impairment, was unable to perform postural changes, to maintain sitting and upright position and to walk (see tables). Months earlier he had recieved a "compulsory sanitary treatment" because of severe behavioural disturbances. Medical treatment included fluid therapy and levodopa/benserazide 125 mg 4/die. The rehabilitation program included: electrostimulation, passive kinesitherapy, postural changes and load exchanges exercises, upright position and gait reheducation, gait Training, cyclette. At the end of the rehabilitation program mobility, static and dynamic balance improved. The control of the trunk was regained and gait improved in step and path. Thank to a program of stimulation and support of cognitive function he showed a progressive reassembly of his affective status. Sociability and emotions in general, contacts with the environment, initiative and performances in some neuropsychological areas improved. He reached a better eutimic status, his behaviours were more acceptable. This case shows how often patients affected by dementia are sent in Emergency Departments because of behavioural disorders and how easily the role pharmacological therapy and hydratation is underestimated.

	Norton Scale Risk of pressure ulcers	Tinetti Scale Risk of falls	Tinetti balance scale	Tinetti gait scale
Admittance	9/20	1/16	1/16	0/12
Discharge	14/20	10/16	10/16	10/12

	MMSE	ADL	IADL	FIM
Admittance	0/30	0/6	2/5	18/126
Discharge	12/30	2/6		54/126

P22 MUSCLE AND RHEUMATOLOGY

P22.01 DEXTERITY IN FINGER OSTEOARTHRITIS: A COMPARISON WITH NORMAL AGEING IN SIMILAR DECADES. W. KITISOMPRAYOONKUL, K. PROMSOPA, D. CHAIWANICHSIRI *(Faculty of Medicine, King Chulalongkorn Memorial Hospital, Chulalongkorn University, Thailand)*

Objectives: To compare finger dexterity between older people with asymptomatic finger osteoarthritis (OA) and normal older people in similar decades. Methods: Two hundred older people aged 60-80 years participated in a cross-sectional study. Ninety-nine subjects (49.5%) were female. Subjects with hand/finger pain, impaired sensation, and weakness of their hand were excluded. The Nine Hole Peg Test was used for finger dexterity testing, performed between 9 a.m. and 3 p.m. The participants performed the test 3 times for each hand, using their dominant hand first, followed by their non-dominant hand. Average performance of each hand was compared between subjects with finger OA and normal subjects. Results: Finger OA was found in 75 right hands (37.5%) and 73 left hands (36.5%). Prevalence of finger OA of female was greater than male ($p < 0.001$). The average performance and standard deviation of the right hand on the Nine Hole Peg Test was 21.59 (3.161) sec. for finger OA and 21.44 (3.157) sec. for normal subjects ($p = 0.75$). The average performance of the left hand was 23.33 (3.133) sec. for finger OA and 23.34 (3.674) sec. for normal subjects ($p = 0.98$). An older people with finger OA was older than normal older people [right hand OA 69.7 (4.8) vs. 67.8 (5.5), $p = 0.018$; left hand OA 69.7 (5.1) vs. 67.8 (5.4), $p = 0.017$]. Conclusions: Asymptomatic finger OA dose not affect finger dexterity comparing with normal aging process.

P22.02 THE OBJECTIVE OF REHABILITATION IN FUNCTIONAL IMPROVEMENT OF GONARTROSIS IN THE ELDERLY PATIENTS. V. OCHIANA[1], S. GHIORGHE[1], G. POPESCU[1], A. TEIXEIRA[2], M. KHAYAT[1] *(1. "Ana Aslan" National Institute of Geriatrics and Gerontology, Bucharest, Romania; 2. 'Fluminense' Federal University, Rio de Janeiro, Brazil)*

Introduction: The knee arthrosis is a very frequent disease in the old age patients (around 85% over 65 years old). This disease affects the patient's mobility and independence with great influence on quality of life (QOL). The therapeuthycal options are different conservative intervention destinated to relieve pain, improve mobility and to delay the surgery intervention. The purpose: This paper is to evaluate rehabilitation program in the elderly patients with gonarthrisis, hospitalized in "Ana Aslan" Institute of Geriatrics and Gerontology, versus a control group treated only by medication. Methods: There were studied 85 patients aged between 70-82 years old, which underwent 4 weeks rehabilitation treatment (kinesitherapy, electrotherapy, hydrotherapy and massage) beside with medical treatment with NSAID, versus a control group treated only with NSAID; were followed up some parameters: pain muscularly strength, balance, walking velocity, dependence, self evaluation for wellbeing. Results: After 4 weeks of treatment, it was an improvement of followed-up parameters, with important improvement of QOL especially in the patients which followed and rehabilitation program comparative with control group. Conclusions: The rehabilitation program beside medical treatment is superior to improve the functional performance and QOL in the old age patients.

P22.03 EFFECTIVENESS OF TWO REGIMES OF GLUCOSAMIN AND CHONDROITIN FOR TREATMENT OF PAIN SYNDROME IN PATIENT WITH KNEE OSTEOARTHRITIS. V. POVOROZNYUK, N. GRYGORYEVA, N. DZEROVYCH, T. KARASEVSKAYA *(Institute of Gerontology AMS, Kiev, Ukraine)*

The research was aimed at evaluating the effectiveness of two regimes (continuous and interrupted) of Theraflex (500 mg glucosaminå hydrochloride, 400 mg chondroitin sulphate) in patients with knee osteoarthritis. Outcomes evaluated were pain, measures of performance (function, activity of daily living, disability), employment status, range of motion, and patient satisfaction/patient global perceived effects. Material and Methods: The first group included 50 patients (aged 64.5±1.1 years) with knee osteoarthritis (II stage, Kellgren-Lawrence's classification), who took the drug in continuous regime during 9 months. The second group included 50 patients with the same diagnosis (aged 64.6±1.0 years), who took Theraflex twice during 3 months with 3 months interruption. We examined the patients before the treatment and after 1, 3, 6, 9 and 12 months. Methods of study: Mc-Gill questionnaire, visual-analogical scale (VAS), Lequen's index, WOMAC, EuroQol-5D, 15-m. test, 6-min. test. Results: After three months of Theraflex's treatment it was observed a reliable decrease of pain syndrome in both groups by WOMAC, decrease of constraint in movements, improvement of index of everyday activity, VAS, 15-m.test. Examination of patients during 6, 9 and 12 months show the effectiveness of both regimes of the therapy. Intensity of pain syndrome and functional activity didn't differ between the groups. Conclusions: During 1-year period two regimes of Theraflex it was established effective decrease of intensity of the pain syndrome and improvement of everyday activity in patients with knee osteoarthritis.

P23 NUTRITION

P23.01 OPTIOMAL BODY MASS INDEX FOR AGED PATIENTS. M. MOWE *(Aker University Hospital and University of Oslo, Norway)*

Introduction: There are several challenges in the study of undernutrition and mortality, like high age, chronic diseases and high occurrence of undernutrition. Nevertheless, studies have shown an increased mortality in undernourished patients. The most common parameter used in the study of undernutrition is BMI. WHO has recommended levels for under- and over nutrition according to BMI, but some studies has questioned what the most favourable BMI is for aged patients. Aims: We have therefore studied the association between 7 years mortality and different nutritional parameters including BMI in elderly with different degrees of morbidity. Methods: 417 aged (70 - 94 years) people included in two groups: One inpatients group (IPG) with high degree of co-morbidity and one outpatients group (OPG) recruited from home. Both groups examined about nutritional status (BMI, TSF, AMC, Biochemistry and vitamin analysis) and followed for 7 years. Results: The overall mortality during the 7 years was 75%, 84% in IOG and 53% in OPG. Increased 7 year mortality was related to low BMI, low TSF, low AMC, smoking, reduced appetite, reduced vitamin C, physical inactivity, low albumin and male sex in addition to high age. Those with BMI < 18 had more than 3 times higher 7 years mortality, compared to those with BMI 24 - 26. Discussion: Mortality increased when BMI was reduced below 21, or above 26, compared to BMI 24-26. When aged people become sick, some kilos extra might be of advantage to avoid disease-related undernutrition, inadequate immune function and better muscle function and recovery. However, it remains uncertain whether nutrition intervention will increase nutritional status and BMI and by that increase survival. In nutritional therapy for aged people, BMI 24 - 26 should be the goal for body mass improvement.

P23.02 BODY MASS INDEX AND VITAMIN D STATUS IN THE ELDERLY. A. SKALSKA[1], D. FEDAK[2], T. GRODZICKI[1] *(1. Jagiellonian University Medical College, Department of Internal Medicine and Gerontology, Krakow, Poland; 2. Jagiellonian University Medical College, Department of Clinical Biochemistry, Krakow, Poland)*

The aim of the study was to evaluate the relationship between body mass index (BMI) and 25(OH)D status. Methods: In all examined patients after clinical evaluation height and weight were obtained, and BMI was calculated. Laboratory test including albumin, 25(OH)D, vitamin D binding protein (DBP) and parathormon (PTH) level were performed. Results: Mean age of 70 examined subjects (47 women, 66%) was 79.62±7.4 years (range 61-95 years). None of the measured parameters differed between sex. In the whole group mean value of 25(OH)D was 40.69±27.51 nmol/L, of BMI - 26.44±5.09 kg/m2, of PTH 58.45±39.7 pg/ml, of DBP 26.71±3.9 mg/dl, and of albumin 39.99±4.3 g/dl. 53 persons (75.7%) had inadequate 25(OH)D level below 50 nmol/L. After dividing the examined subjects according to value of BMI 25 kg/m2 as a threshold for overweight, significant differences in 25(OH)D and albumin levels was found, but not in DBP and PTH concentration.

Parameter	< 25 kg/m2	≥ 25 kg/m2
Albumin (g/dl)	41.33±3.9	39.26±4.3*
25(OH)D (nmol/L)	50.87±36.4	33.91±16.8**
DBP (ng/ml)	26.47±4.1	26.84±3.9

*p<0.05, **p<0.01

In the group of people with BMI<20 kg/m2 25(OH)D concentration was lower than in those with BMI ≥ 20 kg/m2 (21.5±12.3 vs 42.5±27.9 nmol/L). After excluding from the whole group those with BMI <20 kg/m2, the negative correlation between BMI and 25OH)D level was found (r=-0.3, p=0.01). Conclusions: 25(OH)D level is inversely associated with BMI in overweight subjects but underweight patients has also low level of 25(OH)D. Overweight and underweight are risk factors for hypovitaminosis D.

P23.03 DIETARY POLYAMINES DECREASE THE DEATH IN AGED MICE. K. SODA, Y. KANO, T. SHINGO, F. KONISHI, M. KAWAKAMI *(Saitama Medical Center, Jichi Medical School, Saitama City, Japan)*

Objectives: Epidemiologic studies have shown that polyamine-rich food, such as beans and fermented foods, seem to suppress age-related diseases and help prolong longevity. Polyamines suppress the expression of leukocyte function associated antigen-1 and the production of pro-inflammatory cytokines. Because inflammation appears to play an important role in progressing age-related diseases, we tested the effects of dietary polyamines on longevity. Methods: Male JC1:ICR mice were divided into three groups and fed with standard rodent chow until they grew to 24 weeks old. Then, the mice were fed either with high, normal, or low polyamine chow. The low polyamine chow was prepared by eliminating polyamine-rich materials from the standard chow and replacing them with materials of which polyamine concentrations are low. For the normal polyamine chow, synthetic spermine, spermidine and putrescine were mixed in doses of 0.002 % (w/w), 0.008 % and 0.002 %, respectively, with the low polyamine chow. And, for the high polyamine chow, spermine, spermidine, and putrescine were mixed in doses of 0.015 % (w/w), 0.06 % and 0.015 %, respectively. Results:The body weight change among three groups were similar. After 26 weeks of being fed the experimental chows, blood polyamine

concentrations in mice fed with the high polyamine chow were higher than those of the other two groups. Between around 50 to 80 weeks of age, the survival rate of mice fed with the high polyamine chow was significantly higher than that of the other two groups of mice. Conclusions: Dietary polyamines help prolong longevity.

P23.04 SERUM MAGNESIUM LEVELS IN THE ELDERLY: HOW MUCH RELIABLE? Z. ULGER[1], M. CANKURTARAN[1], M. HALIL[1], B.B. YAVUZ[1], B. ORHAN[2], D. DEDE[1], G.O. KAVAS[3], P.A. KOCATURK[3], O. AKYOL[2], S. ARIOGUL[1] *(1. Hacettepe University, Faculty of Medicine, Department of Internal Medicine, Division of Geriatric Medicine, Ankara, Turkey; 2. Hacettepe University, Faculty of Medicine, Department of Biochemistry, Ankara, Turkey; 3. Ankara University, Faculty of Medicine, Department of Patophysiology, Ankara, Turkey)*

Objectives: Magnesium is the fourth most abundant element in the human body and it has various vital functions. It is mainly an intracellular cation, whereas serum level measurement is the only parameter used to evaluate the magnesium levels in most centers. But, the reliability of serum magnesium measurements in evaluation of magnesium status is uncertain. It would be suitable to use more direct methods showing intracellular status. In this study, we compared serum and intra-erythrocyte magnesium levels in the elderly. Methods: In a duration of 3 months, serum and intra-erythrocyte magnesium levels are measured in elderly patients admitted to our geriatrics clinics (n=246). Erythrocyte magnesium measurements are done with atomic absorption spectrometry technique. Results: Mean±SD serum magnesium levels was 2.06±0.17 mg/dl (normal Range: 1.6-2.5) and intra-erythrocyte magnesium levels was 3.50±0.61 ng/104 erythrocyte (normal range: 3.6-6.4). Serum magnesium measurements were in the normal range in all patients. There was no statistically significant correlation between serum and intra-erythrocyte magnesium levels (R: 0.098, p: 0.124). Intra-erythrocyte magnesium levels were low in 57.7% of patients with normal serum magnesium levels (n=246). Conclusions: Serum and plasma magnesium levels may be considered as normal in many conditions with decreased total body magnesium amounts. Magnesium is an intracellular element and acute chances in serum magnesium, usually do not affect intracellular pool. For this reason, using more direct methods which show intracellular levels will give more proper results for magnesium status of the body.

P24 OBESITY

P24.01 STUDY REGARDING CLINICAL, BIOLOGICAL AND PSYCHOSOCIAL FACTORS AFFECTING THE HEALTH CONDITION AND THE QUALITY OF LIFE OF POSTMENOPAUSAL WOMEN. R. PIRCALABU, R. HNIDEI, B. MOROSANU, C. RADA, C. IONESCU *(National Institute of Gerontology and Geriatrics Ana Aslan, Bucharest, Romania)*

Objectives: health condition evaluations in menopausal women and early diagnosis of some disorders as based on the aforementioned evaluated health condition; psychological assessment and early diagnosis of mild cognitive impairment; estimations on quality of life of menopausal women. Methods: In view of these objectives, the following inclusion criteria were established: women who entered the study were of ages 50 to 65; exclusion criteria: surgically induced menopause; hormone replacement therapy; hypertension before menopause; ischemic coronary artery disease and dyslipidemia before menopause onset; metabolic and endocrine disorders before menopause. Clinical examinations, measurements of blood pressure and with regard to ventricle shape as well as weight, height, body mass index, waist and hip circumferences, waist to hip ratio measurements were carried out; glycemia, urea, uric acid, creatinine, total cholesterol, HDL-cholesterol, LDL-cholesterol, triglycerides, ALAT, ASAT and bone density were investigated; questionnaires filled out included the answers related to menopause symptoms, dietary habits, socio-economical class, life-style. We also carried out the Mini Mental State Examination testing in our subjects who also received a depression self evaluation test. Results: this female population sample of ages 50 to 65 presented with major risk factors to develop atherosclerosis, hypertension and diabetes due to visceral obesity, high total cholesterol and LDL-cholesterol levels. Conclusions: Depressive moods in these women could explain their lack of concern for being overweight as at its turn, obesity frequently has posed complex psychological problems with social consequences for families. The depressive mood can become a factor of risk both of cardiovascular diseases and cognitive impairments.

P24.02 EFFECT OF OBESITY INDICES ON INCIDENCE OF DIABETES MELLITUS AND STROKE IN A JAPANESE POPULATION. M. YAMADA[1], F. KASAGI[1], Y. TATSUKAWA[1], H. SASAKI[2] *(1. Radiation Effects Research Foundation, Department of Clinical Studies, Hiroshima, Japan; 2. Hiroshima Atomic Bomb Casualty Council Health Promotion Center, Hiroshima, Japan)*

Although prevalence of excessive bodyweight or obesity among elderly Japanese has increased recently, relationship between obesity indices, such as body mass index and waist circumference, and incidence of diabetes mellitus (DM) or stroke remains unclear in this population. A total of 2999 subjects of the Adult Health Study of the Radiation Effects Research Foundation underwent baseline examination including measurements of obesity, disease history, blood pressure, total cholesterol, HbA1c, grip strength, and so on, from July 1996 to June 1998. These individuals were then followed until December 2006, on the basis of biennial examinations. Coefficient of correlation between the obesity indices and cardiovascular risk factors was calculated, and relationship between the baseline obesity indices and consequent disease occurrence of DM and stroke was analyzed using Cox's proportional hazard regression models. During the follow-up period, 134 cases of DM and 116 cases of stroke were newly diagnosed. The obesity indices showed strong mutual correlation, but correlation between the obesity indices and other cardiovascular risk factors was moderate. Incidence of DM increased significantly with increase in obesity indices. Relative risks accompanying 10cm increments of waist circumference were about 1.8 and 1.6 among men and women, respectively, 50 to 74 years of age. Nevertheless, the obesity indices did not emerge as risk factors for stroke in the first decade.

P25 ORTHOGERIATRICS

P25.01 RISK OF INSTITUTIONALIZATION AFTER FRACTURE FEMUR. P. ALCALDE, M. LUQUE, M. GARCÍA, S. ARIÑO *(Hospital General of Granollers, Barcelona, Spain)*

Raising the hospital discharge may become a problem location in patients who are in a situation of functional dependence, with limited social resources. Our goal is to identify risk factors for admission to residential home for elderly people in patients discharged from acute hospitals with a hip fracture. We performed a prospective study cohort in which the elderly people hospitalized was followed-up from admission to discharge. Information on sociodemographic characteristics, comorbid conditions, geriatric syndromes, functional and metal status, as well as destination on discharge. The variables were analyzed at baseline, at discharge, and at the 3-month follow-up through a telephone interview. The sample included 111 patients (88 female and 23 male, mean age 84). They pose problems location at discharge 60 patients (54%). His destination was at discharge: home 24 (21.6%), residential home 39 (35.1%), and nursing home 42 (37.8%). For the three months was their destiny: home 65 (58.6%), residential home 46 (41.4%). In the univariate analysis is statistically significant the presence of cognitive impairment; dementia; ambulation and transfers at its baseline, and at the three months is significant ambulation, transfers, toileting, and clothing. The multivariate analysis identified as risk factors for institutionalizing the presence of dementia, and at the three months the ambulation, transfers and toileting. The referral to residential home for the elderly after a fractured femur depends crucially on their functional ability after hospital discharge and once made a rehabilitation period, of the presence of dementia and possibly the decisions of their carers.

P25.02 CLINICAL OUTCOME IN ELDERLY WITH PROXIMAL FEMUR OR HUMERUS FRACTURES IN AN ORTHOGERIATRIC REHABILITATION UNIT. G. CARMONA, R. RIZZOLI, P. AMMANN *(Division of Bone Diseases, WHO Collaborating Center, Geneva University Hospitals and Faculty of Medicine, Geneva, Switzerland)*

Benefits of orthogeriatric intervention after hip fracture are well documented. Whilst fractures of the proximal humerus are associated with a marked decrease in functional independence, the influence of orthogeriatic intervention in elderly who have sustained a proximal humerus fracture is still poorly documented. We performed a retrospective observational study in patients admitted to an orthogeriatric unit between 2002 and 2006, for a hip fracture (HIP#, n=291) or proximal humerus fracture (HUM#, n=73). Functional capacity during rehabilitation was evaluated by the Functional Independence Measure (FIM) score at admission, after two weeks, and just prior to discharge. To further evaluate functional outcomes, we separated the functional motor items (MOTOR FIM) into upper and lower limb items (UPPER and LOWER FIM). A significant overall gain was observed for HIP# and HUM# (FIM: 24.1±16 vs. 25.9±13, p=0.4; MOTOR: 20.6±12 vs. 23.3±11, p=0.12; UPPER 5.3±5 vs. 8.7±5, p<0.0001 and LOWER: 6.5±5 vs. 9±5, p<0.0001). The kinetics of various scores increase differed between the groups; in the HIP# the functional gain was significantly higher during the first two weeks, while those in HUM# group improved constantly throughout the observation period. A functional performance gain was observed for both types of fracture independently of a MMSE score. This study indicates that an orthogeriatric rehabilitation program improves the functional performance of elderly who have sustained hip or humerus fractures independently of cognitive level. The kinetics of these positive effects differ in the second half of the recovery period with an increase significantly higher in humerus fractured patients.

P25.03 ORTHOGERIATRIC INTERVENTION IN FALL PATIENTS - A PROSPECTIVE INTERVENTIONAL STUDY. E. PRESSEL, C. EDDY, A. LILJA, F. RØNHOLT *(Gentofte University Hospital, Medical Department C, Hellerup, Denmark)*

Objectives: To describe an orthogeriatric assessment on patients > 65 years admitted after a fall and to evaluate the effect on readmission and mortality rates 30, 90 and 180 days after discharge. Methods: The study was designed as prospective interventional study on the orthopedic surgery ward. 192 patients were included. Inclusion criteriae were age> 65 years, admission due to a fall and contusion or fracture diagnosis except hip and hip-near fractures. Pre- and postoperatively ocurring diseases and complications were treated. Medication was adjusted. The need for fall, osteoporosis and dementia investigation was evaluated. Readmission and mortality rates 30, 90 and 180 days after discharge were compared to register data. Preliminary Results: 102 patients are completed. The average age was 83,8 years and 89 of the patients were female. 81 lived at their own home and 64 received communal home help. 61 patients had stumbled whereas 41 patients had fallen for unknown reasons. There was a high grade of multimorbidity. 38 patients suffered from osteoporosis and 28 from dementia or investigation was necessary. 33 patients needed medicine adjustment. Overall 6-months readmission rate was at 19,2% whereas it was at

37.8% in 2006. Readmission rate in the study population was at 10,8%. Conclusions: There is a signicant reduction of readmission rates in the intervention period. This might be due to the orthogeriatric intervention which seems to be of major benefit for older pa-tients on orthopedic surgery wards.

P25.04 GERIATRIC ASSESSMENT OF HIP FRACTURE PATIENTS IN AN ORTHOPAEDIC WARD. L. DANBAEK, S. VAN DER MARK *(Gentofte University Hospital, Geriatric Department, Hellerup, Denmark)*

Since 2005, hip fracture patients at Gentofte University Hospital have received geriatric assessment 2-3 times a week. Previously, none received osteoporosis treatment. The aim of the geriatric senior consultant has been to clarify indication of acute fall-assessment, osteoporosis-diagnosis and treatment, presence of delirium and dementia as well as optimizing treatment for comorbidity. The prerequisites for osteoporosis assessment were: • the patients' ability to understand the consequences of their medication, or a supporting spouse who requested assessment and medication for the patient. • expected life-span ≥ 3 years. Treatment required t-score ≤ -2.5 (WHO-criteria). Preliminary data from 2006 with 384 patients: 283 women (mean age 81.8) and 101 men (mean age 80.0). 56 patients experienced delirium. 142 of these patients (mean age 82.8) had previous osteoporotic fractures, 69 (mean age 81.6), received various osteoporosis treatments, 41 antiresorptive medications and two PTH. Osteoporosis assessment was indicated for 209 patients, but 36 refused further interventions. Nine patients were technically impossible to evaluate with DXA-scan. Acute fall assessment performed for 18 patients. Patient discharge: private homes (99), rehabilitation units (146), other hospital wards (35), intermediate care (12), nursing homes (62) and 27 died. Our final poster presents complete data from 2006-2007 assessing indication for osteoporosis diagnostic intervention, and consequences observed. We evaluate the presence of delirium and dementia, D-vitamin status, BMI, cause of fall, discharge status and survival data. We elaborate on consequences of geriatric interventions and their cost-benefit.

P26 OSTEOPOROSIS

P26.01 OVEREXPRESSION OF OSTEOBLAST IGF-I BLUNTS THE DELETERIOUS EFFECTS OF LOW PROTEIN INTAKE ON BONE STRENGTH. P. AMMANN[1], B. KREAM[2], C. ROSEN[3], R. RIZZOLI[1] *(1. Division of Bone Diseases, WHO Collaborating Center, University Hospital, Geneva, Switzerland; 2. Department of Medicine, University of Connecticut Health Center, Farmington, USA; 3. Maine Center for Osteoporosis Research and Education, St. Joseph Hospital, Bangor, USA)*

Protein malnutrition is frequently observed in elderly. Isocaloric low protein intake decreases bone mass, intrinsic bone tissue quality and bone strength. These alterations are associated with decreased circulating IGF-I levels. Whether circulating and/or locally produced bone IGF-I are responsible for the negative effects of a low protein diet on bone damages has not yet been established. We investigated 6-month adult transgenic male mice overexpressing IGF-I in osteoblasts under the control of collagene type-1 promoter (TG-IGF) and wild type mice (WT), fed a normal or an isocaloric low protein diet, for 8 weeks. In WT on a low protein diet, compression strength was significantly decreased and resistance to bending displayed a similar trend, whereas these parameters were unchanged in TG-IGF. A cortical thinning as well as alterations of intrinsic bone tissue quality were observed in WT but not in TG-IGF. Outer bone diameter was higher in TG-IGF, irrespective of the protein intake. Endosteal BFR was reduced in WT on a low protein diet, but not in TG-IGF. Trabecular bone mass was significantly decreased in WT only. Plasma IGF-I was similar in WT and TG-IGF, and equally decreased by the low protein diet. These results in adult male mice indicate that overexpression of locally produced bone IGF-I blunts the deleterious effects of a low protein diet, even in the presence of lower circulating IGF-I levels. These results highlight the major importance of osteoblast IGF-I production in maintaining bone integrity in the presence of altered somatotrop axis.

P26.02 PROPENSITY TO ACCUMULATE BONE MICRODAMAGES IS INCREASED IN ADULT FEMALE RATS FED AN ISOCALORIC LOW PROTEIN DIET. V. DUBOIS-FERRIÈRE, R. RIZZOLI, P. AMMANN *(Division of Bone Diseases, WHO Collaborating Center, University Hospital, Geneva, Switzerland)*

Protein malnutrition is frequently observed in elderly and the underlying mechanisms of bone fragility are not fully understood. Low protein intake compromise bone strength through a decrease in bone mass and alteration in microarchitecture, but also through changes in intrinsic bone tissue quality. Whether the low protein diet-induced deterioration of intrinsic bone tissue quality could favor the accumulation of bone microdamages, hence bone fragility, is not known. We investigated the effects of repeated loading on humerus bone strength in 6-month-old female rats pair-fed either a control (15% casein, n=10) or an isocaloric low-protein (2.5%, corresponding to 50% of the minimal requisite for normal bone metabolism, n=10) diet for 10 weeks. The humeri were cyclically loaded in three-point bending under load control for 2000 cycles. The peak load selected corresponded to 60% of the maximal load of the controlateral humerus, thus in the domain of elastic deformation. The humeri were then loaded to failure. We compared the load/displacement curve of the cyclically loaded humerus to the controlateral non-cyclically loaded humerus. Cyclic loading did not induce any deterioration in rats fed a normal protein diet, whereas the cyclic loading regimen negatively influenced the post-yield behaviour of humerus in rats fed a low protein diet, as indicated by significant decreases in post-yield load and plastic deflection. This suggests that bone microdamages could be more prominent in rats fed a low protein diet than in control bones submitted to the same loading regimen, contributing thereby to increased bone fragility.

P26.03 YIELD FROM LABORATORY INVESTIGATIONS AMONGST PATIENTS ATTENDING AN OSTEOPOROSIS CLINIC IN AN IRISH GENERAL HOSPITAL. G. DITLOTO, W. HUSSAIN, E. FARRELLY, P. MARSDEN, L. BREWER, C. FALLON, S. MURPHY *(Midlands Regional Hospital, Westmeath, Ireland)*

It is uncertain whether extensive laboratory investigations are necessary for patients starting osteoporosis therapy. It is important to have a clear indication as to the yield of such investigations. This retrospective study set out to describe the types of laboratory investigations and their yield in new patients attending our specialist Osteoporosis Clinic. Charts of 100 consecutive patients were reviewed and data abstracted using a standard proforma. There were 100 patients in total; 86% female (mean age 62, range 21-86) and 14% male (mean age 63, range 31-85). Mean lumbar spine T-score was -2.8 in males and -3.11 in females. In total, 40.4% had a prior history of minimal trauma fracture. The yield of abnormal new findings (%) from laboratory investigations was as follows: 34% had one or more abnormal laboratory results. We found 2.1% with raised serum Calcium, 4.3% with raised serum creatinine, 9.1% with raised 24 hour urine calcium, 5% with new coeliac serology, 2% with raised serum T4 and 10% with low TSH. Amongst the 25 patients with available 25(OH) Vit D results, 44% had levels < 75 nmol/Litre. The prevalence of stage 3 Chronic Kidney Disease (eGFR < 60) was 32 of 93 patients (34%). Of 30 females treated with bisphosphonates with available before and after urine NTX bone marker data, 28 (93%) showed a decrease (mean 51.1%, P<0.0001) suggesting positive response to therapy. Our data suggest that there is a significant positive yield from the 'metabolic work-up' of patients attending a hospital-based Osteoporosis Clinic.

P26.04 SINGLE NUCLEOTIDE POLYMORPHISMS IN THE P2X7 RECEPTOR GENE ARE ASSOCIATED WITH INCREASED POSTMENOPAUSAL BONE LOSS AND FRACTURE INCIDENCE. N. RYE JØRGENSEN[1], L.B. HUSTED[2], C.L. TOFTENG[3], J.E.B. JENSEN[3], P. EIKEN[4], N. NISSEN[5], B.L. LANGDAHL[2], P. SCHWARZ[1] *(1. Copenhagen University Hospital, Glostrup, Denmark; 2. Aarhus University Hospital, Denmark; 3. Copenhagen University Hospital, Hvidovre, Denmark; 4. Hilleroed Hospital, Denmark; 5. Odense University Hospital, Denmark)*

Objectives: To examine the association of single nucleotides polymorphisms (SNP) in the purinergic P2X7 and P2Y2 receptors to bone mass and vertebral fracture incidence. Methods: 2,016 postmenopausal women were included in the DOPS study and followed for 10 years. Genotyping was performed on DNA from 1710 participants using TaqMan assays. Genotyping was done for five non-synonymous SNP in the P2RX7 gene and for five in the P2RY2 gene. Results: For all SNP Hardy-Weinberg equilibrium was found. Firstly, association of SNP to bone mineral density (BMD) after menopause was examined. No association was found for any of the SNP. Next, the association to BMD five and ten years after menopause was examined as well as rate of bone loss at five and ten years after menopause. We found a significant association between the P2RX7 Arg307Gln SNP with the highest rate of bone loss in the femoral neck in individuals and the GA genotype at both five and ten years (5/10 years: -2.0/-0.9 % per year) compared to the GG genotype (5/10 years: -1.2/-1.4 % per year)(p-value=0.009/0.004). The same was found for bone loss in total hip. Next, we examined the association between P2 receptor genotype and fracture incidence ten years after menopause and found an association between the P2RX7 Ala348Thr SNP and fracture incidence for the three genotypes: GG: 0.13, GA: 0.10, 0.04 (p-value=0.035). Conclusions: SNP in the P2X7 receptor gene are associated with bone loss after menopause as well as susceptibility to vertebral fractures in women.

P26.05 COMPLETED AUDIT CYCLE OF OSTEOPOROSIS TREATMENT ON AN ACUTE ORTHOPAEDIC WARD. DOES EDUCATING ORTHOPAEDIC DOCTORS INCREASE PRESCRIBING? S. MCINTOSH, E. LACEY, C. CARVELL *(Plymouth Hospitals NHS Trust, Department of Elderly Care, Plymouth, UK)*

Objectives: To establish if education of orthopaedic junior doctors leads to an increase in prescribing secondary prevention for osteoporosis for patients with a fractured neck of femur. Methods: A teaching package delivered by a dedicated full time ortho-geraiatric middle grade doctor consisting of 1:1 tutorials explaining the current national guidelines, how to prescribe secondary prevention of osteoporosis appropriately and the need for further investigation. Simplified hospital guidelines were produced and available for quick reference on the ward. Results: Prior to the teaching package, 17 (44%) of 39 patients with fractured neck of femur were discharged on appropriate osteoporosis treatment of alendronate or strontium ranelate. After the teaching package, 15 (39%) of 38 patients were discharged on correct treatment. Reasons for not prescribing treatment were; extreme frailty, advanced dementia and patients requiring palliative care. However, after the intervention, fewer patients were discharged inappropriately without treatment (10% vs. 23%). Conclusions: Educating orthopaedic junior doctors does not lead to increased prescribing of secondary osteoporosis treatment. Time spent in theatre takes priority over secondary prevention. Furthermore, patients with fractured neck of femur are notoriously frail and have complex medical needs. Bisphosphonates are also difficult to take and have important contra-indications. Ortho-geriatricians have the necessary skills and expertise to decide whether to initiate secondary osteoporosis treatment, which investigations are necessary and to choose the most suitable drug. We conclude that prescribing for secondary osteoporosis on a fractured neck of femur ward should be the responsibility of ortho-geriatrians rather than orthopaedic doctors.

P26.06 BONE MINERAL DENSITY IN UKRAINIAN POPULATION OF DIFFERENT AGE AND SEX. V. POVOROZNYUK, N. GRYGORYEVA, Y. KRESLOV, N. DZEROVYCH, I. OZEROV, V. VAYDA *(Institute of Gerontology AMS, Kiev, Ukraine)*

Aim was to study the mineral density of bone in the population of Ukraine depending on age and sex. Subjects: 1145 persons aged 20-89 years (210 men and 936 women) divided into the following age-dependent groups: 20-24, 25-29, 30-34, 35-39, 40-44,45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89 years. Basic inspected parameters presented in a Table 1. Research Methods: the mineral density of bone (BMD) was determined using dual-energy x-ray absorptiometry («Prodigy» unit). Research Results: the indexes of BMD of lumbar spine and hip are presented in Fig. 1. Conclusions: Sexual distinctions in the indexes of BMD become the most expressed after 60 years: BMD spine and BMD hip in women are significantly lower. The substantial decrease of BMD (spine and hip) in men is observed in age-dependent groups 55-59, 75-79 and 85-89 years. Women have two periods of decrease of bone mineral density - 60-69 years and 80-89 years.

Table 1

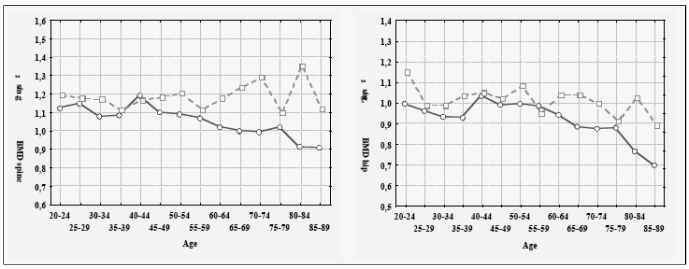
Age, anthropometric characteristics, indexes of bone mineral density of examined patients depending on sex.

Sex	Age, years	Height, m	Weight, kg	BMI	BMD spine, g/sm2	BMD hip, g/sm2
Men	54,6 ± 1,2	1,62 ± 0,002	82,1 ± 1,0	26,7 ± 0,3	1,19 ± 0,02	1,19 ± 0,02
Women	57,7 ± 0,4	1,75 ± 0,005	74,5 ± 0,5	28,3 ± 0,2	1,06 ± 0,01	1,02 ± 0,01

Note: results represented as M ± m

Figure 1

BMD of the representatives of Ukrainian population depending on age and sex: on the left - lumbar spine; on the right - hip. Note: the indexes of women are represented by a circular marker, men – by square marker



P26.07 BONE MINERAL DENSITY IN UKRAINIAN WOMEN. V. POVOROZNYUK, N. DZEROVYCH, T. KARASEVSKAYA *(Institute of Gerontology AMS, Kiev, Ukraine)*

Objective: The aim of this study were: to determine spine, femoral and radial BMD for a representative sample of healthy women of Ukrainian female descent, to determine the effect of age, height and weight on BMD, and to compare these results with those from a large USA/Northern Europe and US/European reference sample. Materials and Methods: The research was conducted at the Ukrainian Scientific-Medical Centre for the Problems of Osteoporosis, and included 353 women aged 20-79 years. Conventional BMD measurements of the spine (L1-L4 in the anterior-posterior position), proximal femur and radial shaft (33% site) were determined by DXA using a densitometer Prodigy (GE Medical systems). Results: Age-related changes in BMD were similar in form to those of USA/ Northern Europe and US/European reference data. However, BMD of spine for subjects of 50-59 years in our sample were lower than published values. Regression analyses showed that weight was a significant predictor of female spine and femur BMD for both the premenopausal and postmenopausal decades. Age was a significant predictor of female spine BMD in the 50-79 year age. The prevalence of osteoporosis and osteopenia for female subjects was 11% at the femur neck, and 20% and 24% at the spine and radial shaft respectively. Conclusion: Thus, standardizing of BMD measurements by DXA through the appropriate use of population-specific reference values is recommended to improve the quality of medical care provided in relation to the prevention and treatment of female subjects who are at risk as for osteoporosis or are already osteoporotic.

P26.08 OSTEOPOROSIS AND HIP FRACTURE. V. POVOROZNYUK, V. VAYDA *(Institute of Gerontology AMS, Kiev, Ukraine)*

Purpose: This work aimed to study the structural-functional state of bone tissue, degree of its aging, and the osteoporosis prevalence in patients with femoral neck fractures. Material and Methods: In the group of 20 female subjects (10 aged 60-69 and 10 aged 70-79 years) with femoral neck fractures, we examined the heel bone of an intact foot by means of ultrasound osteodensitometer "Achilles+". The control group included healthy female subjects of the same age. The following ultrasound parameters were studied: SOS, BUA and STF (Stiffness - the index characterizing the bone tissue density). Results: The ultrasound bone characteristics were fairly better in patients without any fractures in their anamnesis (at 60-69 years: SOS - 1516 ± 3,2 m/s; BUA - 99,8 ± 1,12 dB/MHz; STF - 71,5 ± 1,3; at 70-79 years: SOS - 1508 ± 3,5 m/s; BUA - 95,2 ± 2,31 dB/MHz; STF - 67,8 ± 1,7) compared to those who had the femoral neck fractures (60-69 years: SOS - 1504 ± 2,8 m/s; BUA - 93,4 ± 1,29 dB/MHz; STF - 63,2 ± 1,8; at 70-79 years: SOS - 1495 ± 2,3 m/s; BUA - 89,4 ± 3,16 dB/MHz; STF - 54,8 ± 1,3), $p < 0,001$. The accelerated bone system aging has led to an increase in the proportion of patients with a severe osteoporosis among the women with femoral neck fractures (at 60-69 years - 90 % and at 70-79 years - 100 %). Conclusion. Quantitative ultrasound parameters are strongly associated with femoral neck fracture.

P27 PHARMACOLOGY

P27.01 DRUG-DRUG INTERACTIONS AND THEIR POSSIBLE IMPACT ON GERIATRIC POLYPHARMACY: THE UNDISCOVERED COUNTRY. B. BÖHMDORFER[1], T. FRÜHWALD[2], U. SOMMEREGGER[2], U. MUSTER[1] *(1. Hospital Hietzing with Neurological Centre Rosenhügel, Pharmacy Department, Vienna, Austria; 2. Hospital Hietzing with Neurological Centre Rosenhügel, Department of Geriatric Acute Care, Vienna, Austria)*

Objectives: In the article "Clinical Practice Guidelines and Quality of Care for Older Patients with Multiple Comorbid Diseases" (Boyd CM, Darer J, Boult Ch, Fried LP, Boult L, Albert WW. JAMA 2005 Aug 10; 294 (6): 716-724) Boyd et al. describe a hypothetical multimorbid 79-year-old woman. Potential treatment following clinical practice guidelines consists of 12 medications. This article refers to the pitfalls of indiscriminate application of guidelines in geriatric patients and mentions among other complications some potential drug-drug interactions of this regime. We wanted to investigate the aspect of drug-drug interactions in this case thoroughly and to analyse its possible clinical (geriatic) relevance as well. Methods: We used 3 databases (Clinical Pharmacology, MicroMedex, Medis) to identify possible drug-drug interactions which were then assessed according to their possible consequences for the patient by a geriatrician. Results: We found 48 different drug-drug interactions (only 8 possible drug-drug interactions are mentioned in the aforesaid article). These interactions were rated "relevant and risky" (39%), "relevant but of neutral to possible favourable consequence to the patient" (17%) and "only of hypothetical relevance" (44%). We found 11 interactions that are not mentioned in the original article and which were categorised as "relevant and risky" by us. Conclusions: To detect and to review possible drug-drug interactions systematically is an intricate procedure even when assisted by multidisciplinary cooperation and by databases. Yet awareness of possible drug-drug interactions is crucial to survey and optimise complex geriatric medications.

P27.02 MEASURING APPROPRIATENESS IN GERIATRIC DRUG-THERAPY: EXPERIENCES WITH THE MEDICATION APPROPRIATENESS INDEX (MAI). B. BÖHMDORFER[1], T. FRÜHWALD[2], B. OESER[1], U. SOMMEREGGER[2], U. MUSTER[1] *(1. Hospital Hietzing with Neurological Centre Rosenhügel, pharmacy department, Vienna, Austria; 2. Hospital Hietzing with Neurological Centre Rosenhügel, department of Geriatric Acute Care, Vienna, Austria)*

Objectives: The choice of appropriate drugs is of crucial importance when treating geriatric patients: Their multimorbidity, polypharmacy and limited functional resources make them especially vulnerable to adverse drug reactions or the vast possibilities of drug-drug interactions that come with polypharmacy. We want to gain experience with the Medication Appropriate Index (MAI) as described by Hanlon et al. in 1992 (J Clin Epidemiol), its suitability to analyse complex geriatric medications in our settings, and to find out whether the impact on drug prescription made by physicians with geriatric expertise can be shown by the MAI score. Methods: Retrospective rating of the medication at admission and at the end of the patients´ stay at our Department of Geriatric Acute Care by using the Hanlon´s MAI. Additional search for possible undermedication, since this aspect is not covered by this instrument. Interdisciplinary evaluation by a geriatrician and a pharmacist. Results: Since this analysis is still ongoing final results are still pending. Intermediate results show drastically improved MAI-scores as well as reduced to nonexistent undermedication in the medication at the end of the stay. Conclusions: Although time-consuming the MAI turns out to be a valuable tool to assess medication of our geriatric patients interdisciplinarily and to prove the value of specialised geriatric intervention in drug therapy.

P27.03 THE PATTERN OF DRUG USE AND POTENTIALLY INAPPROPRIATE DRUG USE FOR ELDERLY PATIENTS BASED ON BEERS' CRITERIA. C. CHO[1], B. YOO[1], J. OH[1], K. CHO[2], H. LEE[3] *(1. Soonchunhyang University Hospital, Seoul, South Korea; 2. National Health Insurance Corporation Ilsan Hostpital, South Korea; 3. Ewha University, Seoul, South Korea)*

Background: Potentially inappropriate prescribing for older adults might increases the possibility of adverse drug reactions and of drug-drug interactions. This study purposed to survey the current state of older patients' drug use and potentially inappropriate drug use for them based on Beers' criteria. Methods: Data were collected from 3 hospitals on prescriptions issued for elderly patients aged over 65 during the period from January 1, 2004 to September 30, 2007. Data obtained from the hospital systems were processed through multiple cross-tabulation analysis using SPSS. Results: The number of drugs prescribed for each outpatient was 3.3 on the average. In addition, 11.4% of outpatients had only one drug and 0.02% of them had 25 or more drugs. According to the result of

analyzing patients administered with drugs, which should be used carefully to elderly patients, using Beers' criteria, 5.8% of the outpatients were given one or more drugs of such type. The most frequently prescribed drugs were diazepam, cimetidine and nifedipine. Nearly 57% of inpatients were given drugs should be used carefully, and 7.2 drugs per patient on the average. The most frequently prescribed drugs of such type were chlorpheniramine, cimetidine and nifedipine. Conclusions: As some of drugs prescribed for old patients have a high possibility of toxicity and side effects, practitioners serving older patients need to scrutinize information on potentially inadequate drugs according to Beers' criteria and, at the same time, manage the prescription of such drugs carefully.

P27.04 ELDERLY PSYCHIATRIC PATIENTS AND MEDICINE-MASTERY. A. CLEMMENSEN, M. LAURIDSEN, N.B. NIELSEN *(Regionspsykiatrien Herning, Denmark)*

Our geronto-psychiatric ward has during a 3 moth period in 2008 done a both qualitatively and quantitatively monitored praxis-developing project. The project has been focusing upon safety and patient-mastery in relation to administration and use of medicine concerning the themes: • Empowering patients and their relatives in relation to the use of medicine. • Cooperation with primary care • Critical checkpoints and procedures in our aim for avoiding adverse drug events? Methods: The ward participates in Operation Life Campaign. It has been quantitatively measured to which extend the reconciling medications at transition-points was performed for every discharged patient, and it has also been audited in a qualitatively way focusing upon the working alliances and cooperation with patients as well as the cooperation with relatives to the patient and with primary care. During the project the ward began talking about "medicine-mastery", and developed tools in relation to this: Very practical ways of dealing with questions concerning the daily use of medicine facilitating cooperation with the patient, the relatives and primary care. Lessons learnt and messages for others: The audit shows that adverse advents can happen in critical points of transition. There actually were two such cases, although no patients were harmed in the particular events. The audit also shows how brilliant working alliances between staff, patients and relatives are the basics for empowering the patients and their network to better and more safe use of medicine: Good medicine-mastery. Finally it shows how essential the cooperation between all involved parts is.

P27.05 PREDICT: INCREASING PARTICIPATION OF THE ELDERLY IN CLINICAL TRIALS. P. CROME[1], J. SINCLAIR-COHEN[2], A. CHERUBINI[3], J. ORISTRELL[4], C. HERTOGH[5], K. SZCZERBINSKA[6], V. LESAUSKAITE[7], G.-I. PRADA[8], M. CLARFIELD[9], E. TOPIKOVA[10], P. DIEPPE *(1. Keele University Medical School, UK; 2. Medical Economics & Research Centre Sheffield, UK; 3. University of Perugia, Italy; 4. Sabadell Hospital, Parc Tauli, Spain; 5. V U University Medical Centre, Netherlands; 6. Jagiellonian University Medical College, Poland; 7. Kaunas University Of Medicine, Lithuania; 8. Ana Aslan National Inst. of Gerontology & Geriatrics, Romania; 9. Ben Gurion University, Israel; 10. Charles University, Prague, Czech Republic)*

Introduction: Older people, particularly those over 80 and those with co-morbidity, are under-represented in clinical trials, posing serious decision-making dilemmas for physicians and patients. PREDICT - supported by EU, FP7 Health research, grant number HEALTH-F4-2008-201917- will gather evidence about older people's participation in studies to produce a Charter on Clinical Trials for Older People. Work packages (WP): The study, coordinated by the Medical Economics and Research Centre, Sheffield, (MERCS) UK, will take place in 9 countries: UK, Italy, Spain, Netherlands, Poland, Lithuania, Romania, Israel and Czech Republic. It comprises 5 WPs: WP1: A systematic review of the literature on inclusion/exclusion of older people in clinical trials and a census of ongoing trials using selected clinical trial databases. WP2: A questionnaire survey of clinicians, ethicists and regulators to elicit opinions on the reasons for under-representation and views on how the situation might be remedied. WP3: An investigation of the perceptions of older patients and carers on clinical trials using a focus group methodology WP4: Development of a workable charter to influence future clinical trials; including rights to participation, improved patient information and parity with younger peers. It will be translated into the languages of the participating countries. WP5: Dissemination will include publications, presentations and a final conference launching the charter. Conclusions: The study started in February 2008 will end in 2010. Implementation of the Charter will hopefully improve the therapeutic decision-making process and consequently patient satisfaction and outcomes. Further information: predict@mercs.org.uk

P27.06 INAPPROPRIATE PRESCRIBING AND ADVERSE DRUG EVENTS IN OLDER PATIENTS. P. GALLAGHER, D O'MAHONY *(Cork University Hospital, Department of Geriatric Medicine, Cork, Ireland)*

Objectives: STOPP (Screening Tool of Older Persons' potentially inappropriate Prescriptions) is a new, systems-defined drug-utilisation review tool. We compared the performance of STOPP to that of established Beers' criteria in detecting potentially inappropriate medicines (PIMs) and their relationship to adverse drug events (ADEs) in older patients requiring hospitalisation. Methods: We prospectively studied 715 consecutive, non-selected, patients aged >= 65 years admitted to a university teaching hospital. Reason for admission, co-morbidities and concurrent medications were recorded. ADEs on admission were identified. STOPP and Beers' criteria were applied. PIMs with clear causal connection or contribution to the principal reason for admission were determined. Results: Median patient age (interquartile range) was 77 (72-82) years. Median number of prescription medicines was 6 (range 0-21). Ninety admissions (12.5%) were related to ADEs. STOPP identified 336 PIMs affecting 247 patients (35%), of which 82 presented with an associated ADE (11.5% of admissions). Beers' criteria identified 226 PIMs affecting 177 patients (25%) of which 43 presented with an associated ADE (6% of admissions). The most common ADEs were gastrointestinal bleeding, acute kidney injury secondary to inappropriately prescribed NSAIDs and falls and cognitive decline secondary to inappropriately prescribed psychotropic medications. Conclusions: Inappropriate prescribing is highly prevalent in acutely ill older patients and is associated with ADEs. STOPP identified a significantly higher proportion of patients requiring hospitalisation as a result of PIM-related adverse events than Beers' criteria. If used for PIM screening, STOPP criteria have the potential to reduce the risk of ADEs in older people.

P27.07 METHODS FOR IMPROVING COMPLIANCE WITH MEDICINE INTAKE (MICMI): A VALIDATION OF QUESTIONNAIRE 'ELDERLY MEDICINE COMPLIANCE QUESTIONNAIRE (EMCQ)'. P. HARBIG[1], I. BARAT[1], P. LUND NIELSEN[2], E.M. DAMSGAARD[1] *(1. Aarhus University Hospital, Department of Geriatrics, Aarhus, Denmark; 2. Vejlby Apotek, Aarhus, Denmark)*

Objectives: Noncompliance with medicine intake is a major problem for medicine treatment. Methods for Improving Compliance with Medicine Intake (MICMI) is a research project to evaluate compliance with medicine intake in an elderly population. The aim of the project is to compare different registration and intervention methods. One of the registration methods is the questionnaire EMCQ. Research design and Methods: A randomized study involving 2 pharmacists and 1 nurse and including 22 participants aged at least 65 years. Compliance was assessed under blinded condition by pill count and EMCQ at two home visits. EMCQ includes 14 questions and is based on Morisky 4-item, compliance-questionnaire-rheumatology and COMPASS questionnaire. Result: In 17 out of 22 participants there is a concordance in [non]-compliance measured by EMCQ and pill count. 1 participant has better compliance in EMCQ than in pill count, 2 participants have lower compliance in EMCQ than in pill count and 1 person was noncompliant in pill count, but compliant in EMCQ. Conclusions: EMCQ can be used in research for measuring compliance with medicine intake.

P27.08 POLYPHARMACY OPTIMIZING METHOD (POM) - EFFECT ON APPROPRIATE PRESCRIBING. A.C. DRENTH-VAN MAANEN[1], R.J. VAN MARUM[1], W. KNOL[1], C.M.J. VAN DER LINDEN[2], P.A.F. JANSEN[1] *(1. University Medical Centre Utrecht, Department of Geriatrics, The Netherlands; 2. Catharina Hospital, Eindhoven, The Netherlands)*

Objectives: Optimizing polypharmacy is often complex. Frequently critical appraisal of medication use leads to one or more changes. In order to assist general practitioners (GP's) to optimize polypharmacy, we have developed a method, based on 6 questions: 1) Is undertreatment present and should a medication be added? 2) What does the patient really use? 3) Which drug(s) is (are) not necessary? 4) Which adverse effects are present? 5) Which clinically relevant interactions can be expected? 6) Should the dosage, the dose frequency, and/or form of the drug be adjusted? The aim of this study is to evaluate the usefulness of POM as a tool to improve appropriate prescribing of complex polypharmacy. Methods: 45 GP's received out of 10 cases of geriatric patients, with a mean of 7,9±1,2 problems treated with 8,7±3,1 drugs, at random 2 cases. The first case was optimized without knowledge of POM. After a lecture of 45 minutes about the POM the second case was optimized with help of POM. All cases were conducted within 20 minutes. The outcomes were compared with appropriate answers, composed by consensus of an expert panel of 4 geriatricians/clinical pharmacologists. Data were analyzed with a linear mixed effect model. Results: Use of POM showed a significant improvement of optimization. The percentage right decisions increased from 34,7% without POM to 48,1% with POM (p=0,0037). The number of potentially harmful decisions decreased from 3,3 without POM to 2,4 with POM (p=0,0046).Conclusions: The Polypharmacy Optimizing Method improves appropriate prescribing of complex polypharmacy.

P27.09 EFFICACY AND SAFETY OF TRANSDERMAL BUPRENORPHINE VERSUS PROLONGED RELEASE TRAMADOL FOR CHRONIC OSTEOARTHRITIS PAIN: A RANDOMISED CLINICAL TRIAL. M. KARLSSON[1], A.-C. BERGGREN[2] *(1. Smärtkliniken Sankt Olof, Falköping, Sweden; 2. Munddipharma AB, Göteborg, Sweden)*

Aims: To evaluate the efficacy and safety of buprenorphine TransDermal System (BTDS) versus prolonged release tramadol in subjects with chronic, moderate to severe, osteoarthritis (OA) pain of hip and/or knee. Methods: Adult subjects with OA of the hip and/or knee and moderate to severe pain, confirmed by an average Box Scale-11 (BS-11) score ?4 during the previous week, were enrolled. Subjects were randomised (1:1) to receive either 7-day BTDS (5, 10, 15 and 20 mg) or twice-daily prolonged release tramadol (75, 100, 150 and 200 mg) over a 12-week open treatment period. Primary endpoint: difference in BS-11 pain score from baseline to treatment completion. Results: In total, 134 patients (BTDS [n=65]; tramadol [n=69]) received ?1 dose of study medication. Mean age was 64 years (range 36-88 years) with 43% >65 years. Both treatments showed a significant reduction in pain from baseline to study completion. Change in mean BS-11 scores was -2.26 (CI: -2.76 to -1.76) vs -2.09 (CI: -2.61 to -1.58) for BTDS and tramadol, respectively. Efficacy of BTDS was demonstrated to be non-inferior to prolonged release tramadol. Adverse events (AEs) were similar for both treatment groups. Discontinuations due to AEs were 14.5% vs 29.2% for BTDS and tramadol, respectively. The majority of subjects (70%) responded that they would prefer a 7-day patch to a twice daily tablet for their future pain treatment. Conclusions: Buprenorphine TransDermal system is an effective and well-tolerated analgesic with comparable efficacy to prolonged release tramadol in the treatment of chronic joint pain associated with osteoarthritis.

P27.10 EFFECT OF MEDICATION REVIEW IN ELDERLY PEOPLE OVER ONE YEAR PERIOD. P. LAMPELA[1], S. HARTIKAINEN[1], P. LAVIKAINEN[1], R. SULKAVA[1], R. HUUPPONEN[2] *(1. University of Kuopio, Finland; 2. University of Turku, Finland)*

Drug consumption is high among the elderly, which increases the risk of adverse drug reactions. Possible inappropriate prescribing practices further increases that risk. Clinical medication reviews have been shown to reduce drug-related complications. However, little is known about long-period effects of medication assessment. Objectives: We followed the fate of medication changes introduced by a physician-based drug intervention over one year, during which the subjects used services provided by ordinary health care. Methods: Home-dwelling people (n=332 and 312 for the intervention and control groups, respectively) aged 75 or more were included in this study. In both groups, the patients were interviewed by trained nurses, who also listed their current medication. This interview was repeated after one-year period. Shortly after nurse's interview, a comprehensive geriatric assessment for those in the intervention group was performed by study physicians. After the assessment, the physicians adjusted the medication when necessary. Results: In general, there were more modifications of medication in the intervention than in the control group. Medication changes were also interpreted as a patient benefit. 58 % of new prescriptions by study physicians were still in use after one year, while one quarter of the drugs canceled by him/her were reintroduced later. Conclusions: During one year, elderly patient's medication may be modified by many general practitioners as well as by specialists in several disciplines, which may decrease the power of medication assessment. Therefore, it would be good if a single physician were in charge of coordination of the medication.

P27.11 MAJORITY OF TUBE FED PATIENTS ARE PRESCRIBED MEDICATIONS WHICH REQUIRE SPECIAL INSTRUCTIONS. M. THERESE LONERGAN, T. COUGHLAN, D. O 'NEILL *(Adelaide and Meath Hospital, Age Related Health Care, Dublin, Ireland)*

Introduction: Co-administration with food and crushing of medication are a common feature in tube fed patients. Both of these practices can alter the pharmacokinetics of medications and potentially lead to enhanced toxicity and decreased therapeutic efficacy. We undertook a study in our institution to determine the prevalence of prescription of medications which required special precaution in tube fed patient methods. Prescribed medications of inpatients who received medications via NG or PEG were reviewed to determine the total number of prescribed medications , and the presence of medications which required special instructions. Results: Our hospital wide survey revealed 24 (5 surgical and 19 medical, age range 38-91) out of a total 400 adult in patients in acute beds were receiving medications via NG or PEG tube. Ten received medications via PEG and 14 via NG. Average number of medications delivered was 14 (range 5 – 24) At the time of the survey all tube fed patients surveyed were prescribed at least 1 medication requiring special instruction (average of 3 per patient). 55% of the surveyed population were on inappropriate formulations. 24.6 % were on enteric coated preparation, 11.6 %were on medications with food interaction. Conclusions: Majority of tube fed patients are on medications that require special precautions. The most prevalent error in this group is prescription of inappropriate formulation of medication. There is need for increased awareness regarding potential adverse events amongst health care personnel looking atfter this group of patients.

P27.12 PRESCRIBING IN SWALLOW DISORDERS. M. THERESE LONERGAN, T. COUGHLAN, D. O 'NEILL *(Adelaide and Meath Hospital, Age Related Health Care, Dublin, Ireland)*

Administration of medications to dysphagic patients can have important pharmacological considerations. Crushing medication is a common practice and can lead to altered pharmacokinetics. Aims: To survey staff awareness of potential for adverse events when administering medications in crushed form by NG tube or PEG. Methods: A questionnaire was distributed to doctors (n=30) and nurses (n=25) across all specialties in a university teaching hospital. Information regarding awareness of suitability of 8 commonly used drugs (including 2 enteric coated preparations,3 long acting and 3 tube compatible medications) for administration via NG /PEG was collected. Respondents selected yes, no, or don't know in each case. JMP version 7 (SAS) software was used for statistical analysis, p value of <0.05 was considered significant. Results: Our study shows that on average 35% of doctors and 46% of the nurses are unaware of the need to maintain the integrity of modified release formulations in the setting of dysphagia. 30% doctors and 40% nurses were unaware of the potential for tube clogging with crushing of enteric coated tablets. 33% of nurses and 10% of doctors were unaware regarding crushing regular acting tube compatible medications. Conclusions: Our study suggests that there is a lack of awareness both among doctors prescribing and nurses administering medications via enteral tube. Further education is needed in the prescribing and administering of commonly used medications to dysphagic patients.

P27.13 PREVALENCE OF ASSORTED FACTORS INFLUENCING PHARMACOTHERAPY AT PATIENTS AT GERIATRIC DEPARTMENT. S. KRAJÈÍK, P. MIKUS *(Department of Geriatrics, Slovak Medical University, Bratislava, Slovak Republic)*

Prevalence of factors affecting pharmacotherapy was studied at the group of 201 inpatients of geriatric department. The most frequent negative factor was polypharmacy (using 5 and more drugs), presented at 90,5 % patients (average number of drugs by a patients were 8,5). Drugs potentially inappropriate for older people were used by 18,4% patients (the most frequent being ticlopidine - 13,4%). Positive history of drug allergy was at 12,5% patients. Dementia was presented at 34,8% patients and delirium at 10% of them. 48 % patients had albumin concentration lower than 35g/L (29,9% lower than 30g/l) 18,9% patients had chronic kidney insufficiency (creatinine clearance below 60ml/min). Probably most overused drugs were H 2 blockers ad PPI used by 24.5% patients, nootropics (26,7%) and infusions (30%).

P27.14 INAPPROPRIATE PRESCRIPTION IN GERIATRIC OUTPATIENTS: A COMPARISON OF TWO INSTRUMENTS. B. MONTERO ERRASQUIN[1], M. SÁNCHEZ CUERVO[2], C. SÁNCHEZ CASTELLANO[1], E. DELGADO SILVEIRA[2], T. BERMEJO VICEDO[2], A.J. CRUZ-JENTOFT[1] *(1. Servicio de Geriatría, Hospital Universitario Ramón y Cajal, Madrid, Spain; 2. Servicio de Farmacia, Hospital Universitario Ramón y Cajal, Madrid, Spain)*

Objectives: inappropriate prescription of drugs is frequent in older patients. Existing criteria for the detection of inappropriate prescription are still controversial. Recently, a new screening tool has been developed (STOPP-START, Gallagher et al, Int J Clin Pharmacol Ther 2007) to detect both potentially inappropriate prescription and potentially indicated drugs. We compared these new criteria with Beers criteria in a geriatric outpatient clinic setting. Methods: STOPP-START and Beers criteria were used by an independent observer (a pharmacist not involved in patient care) in 50 consecutive outpatients older than 69 years. Results: Mean age: 81.5±4.5 years, 64% women. Mean number of prescription drugs per subject: 5.8±3.1. Beers´ criteria found that 26% of the subjects used potentially inappropriate drugs (the most frequent mistake was the use of anticholinergic drugs in patients with cognitive impairment or constipation). STOPP criteria found that 54% of the subjects received potentially inappropriate drugs (the use of benzodiazepines in frequent fallers was the most frequent problem). Besides, START criteria found that 48% of the subjects were not receiving indicated drugs for some diseases (underuse of statins in subjects with documented history of coronary, cerebral or peripheral vascular disease, and life expectancy greater than 5 years, and lack of fibre supplements in symptomatic diverticular disease with constipation were the most frequent problems). Conclusions: STOPP criteria detect a higher number of subjects with potentially inappropriate drug prescription than Beers criteria in this outpatient geriatric population. START criteria also detected many subjects who were not receiving appropriate drug treatments for their diseases.

P27.15 QUALITY OF MEDICATION PRESCRIBING IN BELGIAN NURSING HOMES. M. PETROVIC[1,2], K. COBBAERT[1], R. VANDER STICHELE[2] *(1. Department of Geriatrics, Ghent University Hospital, Belgium; 2. Heymans Institute of Pharmacology, Ghent University, Belgium)*

Aims: To assess prescribing quality in residential elderly we analysed the databank of the field study Prescribing in Homes for Elderly in Belgium (PHEBE). Methods: A cross-sectional descriptive study of a representative sample of nursing home residents. The medication charts of 2510 residents in 112 nursing homes were collected. The following prescribing quality indicators were applied: ACOVE Criteria for underprescribing, Beers Criteria for inappropriate prescribing and Bednurse Criteria (Bergen District Nursing Home Study) for nursing home residents. Results: According to ACOVE criteria underutilisation was observed in heart failure, myocardial infarction, diabetes and osteoporosis. Among residents with heart failure 23% did not receive beta blockers and 20 % ACE-inhibitors. After a myocardial infarction 18% did not receive beta blockers and 11% aspirin. In 9% of residents with diabetes aspirin was not given. Also 8% of the residents with osteoporosis did not receive calcium supplements. Beers Criteria identified inappropriate use of digoxin (7%), oxybutinin and amiodarone (4% respectively). Bednurse Criteria revealed a common use of antipsychotics (12%), a combination of antidepressants with antipsychotics or benzodiazepines (25%), multiple antidepressants (4%), long-acting benzodiazepines (2%), chronic NSAID (4%) and combination of medicines with a risk of hyperkalemia (11%). Conclusions: A high rate of beta blocker and ACE-inhibitor underprescribing was observed in heart failure as well as post myocardial infarction. Beers Criteria identified potentially inappropriate use of digoxin, oxybutinin and amiodarone in a limited group of the residents. Bednurse Criteria revealed the high prevalence of chronic use and combination of psychotropic medication.

P27.16 ADVERSE DRUG REACTIONS IN THE COMMUNITY-DWELLING ELDERLY SUBJECTS IN POLAND. A. RAJSKA-NEUMANN, K. WIECZOROWSKA-TOBIS *(University of Medical Sciences, Department of Geriatrics and Gerontology, Poznan, Poland)*

Objectives: The aim of the study was to investigate the prevalence of adverse drug reactions (ADRs) in the community dwelling elderly subjects living in two cities in Poland. Methods: The study involved 680 residents of Poznañ-P (mean age: 72,6±6,5) and 320 residents of G³ogów-G (mean age: 72,5±6,0) and was based on the questionnaire concerning different aspects of pharmacotherapy. The collected data were screened for ADR (quantitative and qualitative aspects). Results: ADRs were reported by more than one third of all subjects (P:39,1% vs G: 35,0%, ns). The most common reason for ADRs were: cardiovascular drugs (angiotensin-converting enzyme inhibitors and nitrates)[P:G 24,1% vs 29,9% of the people taking a certain group of drugs, ns], muscular-skeleton system drugs (derivatives of acetic acid from the group of NSAIDs i.e. diclofenac, central acting muscle relaxants i.e. tetrazepam, derivatives of propionic acid i.e. ibuprofen,

bisphosphonates)[19,2% vs 16,7%, ns], central nervous system drugs (pirasolon and salicylic acid and its derivatives i.e. prophyphenazon, benzodiazepines derivatives i.e. diazepam, estazolam, acetylocholinesterase inhibitors)[18,7%vs 24,1, ns] and antimicrobial drugs (penicillin sensitive to α-lactamase, cephalosporins)[18,6% vs 11,1%, ns]. The main symptoms of ADRs were: gastrointestinal disturbances (P: 50,0% of persons declaring symptoms of ADRs, G: 53 [47,3%], ns), dizziness and balance disturbances (P: 98 [36,8%], G: 57 [50,9%], ns). Interestingly, great number of subjects were afraid of potential ADRs while they were prescribing drugs (P: 55,4% vs G: 40,3%, p<0,001). Conclusions: The prevalence of ADRs among elderly subjects in Poland was high. There is a need for better diagnosing and preventing ADRs.

P27.17 POTENTIAL INAPPROPRIATE PRESCRIBING IN ELDERLY PATIENTS IN PRIMARY CARE. C. RYAN[1], J. KENNEDY[1], D. O'MAHONY[2], S. BYRNE[1] *(1. School of Pharmacy, University College Cork, Ireland; 2. Departement of Geriatric Medicine, Cork University Hospital, Ireland)*

Introduction: Inappropriate prescribing (IP) is a significant problem, particularly in the elderly. Screening tools have been formulated to identify potential IP. Beers' Criteria is the most widely used but has disadvantages when applied in Europe. A new tool: Screening Tool of Older Person's Prescriptions (STOPP) and Screening Tool to Alert doctors to Right Treatment (START) has been developed to identify potential IP and prescribing omissions. Objectives: To identify potential IP rates and errors of omission in primary care using Beers' Criteria and STOPP/START. Methods: 1,329 patients over 65 years were recruited from 3 GP surgeries in Cork. (A: n=266, B: n=488 and C: n=575). Terminally ill and nursing home residents were excluded. Medical notes were reviewed and the tools applied. Results: Mean age was 74.9 ± 6.4 years (SD) and 809 (60.9%) were females. The total number of medicines prescribed was 6,687; median 5 ± 3.0 (SD) (range 1-19). The potential IP and prescribing omissions identified for each surgery is shown (Table 1). Disproportionate higher rates of doxazosin prescribing accounted for 9.2% of the IP identified in C.

Table 1
The percentage of patients identified with at least one IP/omission

Tool	Surgery A (%)	Surgery B (%)	Surgery C (%)
Beers' Criteria	11.7*	13.3¥	25.6
STOPP	17.3*	20.3¥	24.2
START	19.9	25.8	21.2

*¥(p<0.01)

Conclusions: Potential IP rates varied among practice. STOPP identified a much larger range of medicines than Beers' Criteria. START identified numerous prescribing omissions across all surgeries that would not have been identified by using Beers' Criteria alone.

P27.18 SERUM DIGOXIN LEVELS, HOSPITAL ADMISSIONS, AND EMERGENCY ROOM VISITS IN OLDER SUBJECTS. C. SÁNCHEZ CASTELLANO[1], C. GUTIÉRREZ FERNÁNDEZ[2], B MONTERO ERRASQUÍN[1], J.M. DEL REY[2], M.I. ARRANZ PEÑA[2], A.J. CRUZ-JENTOFT[1] *(1. Servicio de Geriatría. Hospital Universitario Ramón y Cajal. Madrid. Spain; 2. Servicio de Bioquímica Clínica. Hospital Universitario Ramón y Cajal, Madrid, Spain)*

Background: Digoxin intoxication may have atypical presentations in older subjects. Adverse drug reactions to digoxin can potentially appear within the therapeutic range of serum digoxin. Objectives: To determine if serum digoxin levels in the normal range were associated with the need of hospital care. Methods: Serum digoxin levels of all patients older than 69 years determined by the hospital central lab in a one year period were collected (including samples from inpatients and outpatients of the hospital catchment area). Hospital admissions and emergency room visits in the same period were recorded for these subjects. Results: Data from 150 subjects were included. The number of ER visits increased with serum digoxin concentrations (SDC): those with SDC <0.5 ng/mL had a mean of 1.15 ER visits/year; SDC 0.5-1 ng/mL: 1.68 ER visits/year; SDC 1-1.5 ng/mL: 2.22 ER visits/year; SDC 1.5-2.5 ng/mL: 2.6 ER visits/year; and SDC>2.5 ng/mL: 4.66 ER visits/year. A slower progression was found for hospital admissions, with 0.76 admissions/year for SDC<0,5 ng/ml, changing in the same SDC groups to 0.77, 1.16, 0.80 and 2 admissions/year. No significant changes were found after adjustment for gender, renal function and potassium levels. Conclusions: Older individuals have an increased number of ER visits when SDC rise; this increase starts when SDC are still in the usual therapeutic range. Hospital admissions only increase when SDC are over normal levels. Serum digoxin levels from 1.0 to 1.5 ng/ml could be related with subtle clinical instability in older people.

P27.19 AN ACTIVE PHARMACOVIGILANCE PROJECT IN A SWISS GERIATRICS CENTER. L. TOUTOUS TRELLU[1], D. VILLANEAU[2], Y. PAREL[2], N. VOGT-FERRIER[3] *(1. University Hospital of Geneva, Department of Dermatology, Geneva, Switzerland; 2. University Hospital of Geneva, Rehabilitation and Geriatrics Department, Geneva, Switzerland; 3. University Hospital of Geneva, Pharmacology, Rehabilitation and Geriatrics Departments, Geneva, Switzerland)*

Introduction : Drug toxicity in the elderly remains a common cause of morbidity. We present the impact of a pharmacology and dermatology collaboration on ADE reporting in a Geriatrics hospital. Objectives: optimize the registration of any drug reaction in hospitalised older adults. Methods: Patients with suspected cutaneo.mucous adverse drug reactions are seen by the pharmacologist and the dermatologist. Cases are documented by photographs and/or cutaneous biopsy. Results: In 2007, on 50 ADE registered, 30 were toxidermias, representing 60% of all the adverse events registered in the departement. Five were severe reactions: 2 drug rashes with eosinophilia and systemic symptoms, 2 Stevens-Jonhson Syndrome, 1 acute generalised pustular exanthema. Among benign toxidermias, 11 were maculopapulous exanthemas, 2 urticarias and one a fixed drug eruption. 10 others reactions were of special interest or uncommon: 1 phototoxicity, 1 erythrodermia, 4 vasculitis, 2 generalised pruritus, 2 local hematomas and one contact dermatitis. Toxidermias were attributed to one or sometimes two drugs. 2 patients were unvoluntarily rechallenged during their hospitalisation. 87% of the patient's final medical reports mentionned the suspected drug(s). Discussion: Skin was the major organ involved by adverse drug reactions in our department. This is explained by the early and systematic collaboration between the dermatologist and the pharmacologist. As the geriatric population is particularly fragile we encourage early and clear procedures for the work-up and documentation of any drug reaction.

P27.20 ASSESSMENT OF POLYPHARMACY IN HOME CARE PATIENTS IN HELSINKI. J. VANAKOSKI, T. JOKINEN, L. SKIPPARI, M. ISO-AHO *(City of Helsinki Home Care Division, Finland)*

Objectives: High number of prescription drugs increases the possibility of complications related to drug treatment. The aim of this study was to assess the frequency of potentially serious drug-drug interactions, overlapping medications and the use of inappropriate drugs among home care patients in Helsinki. Methods: In 2006-2007, the medication data of home care patients (age > 75 years, n = 389) in two areas of Helsinki were collected. The medications of individual patients were assessed to identify potentially serious drug-drug interactions (DDIs) with the SFINX database. Overlapping medications were checked according to their ATC codes and the medication was assessed for certain inappropriate drugs (combination of ≥ 3 psychiatric drugs, benzodiazepines with long half-life, anticholinergic drugs). Results: The majority of the patients (81%) were females and half of them over 85 years of age. The participants used 8.0 regular medications on average. Potentially serious DDIs (class D) were identified in 10 patients (2.6%). Overlapping medications were observed in 2.1% (n=8), but no cases of identical active ingredient use were found. The combination of three or more psychiatric drugs was observed in 3.3% and the use of benzodiazepines with long half-life in 4.1% (n=16) of the patients. Drugs with marked anticholinergic effects were used by 10.5%. Conclusions: Polypharmacy was common among home care patients. Nevertheless, potentially serious drug interactions and other problems related to multiple medications were fairly uncommon. Overall, the assessment of individual potentially serious DDIs revealed that they had been taken into account beforehand and necessary precautions implemented.

P28 RESPIRATORY DISORDERS

P28.01 A PROBIOTIC FERMENTED DAIRY PRODUCT IMPROVES THE CLINICAL OUTCOME OF COMMON WINTER INFECTIONS IN A POPULATION OF ELDERLY. E. GUILLEMARD[1], F. LACOIN[2] *(1. Danone Research, Research and Development, Palaiseau, France; 2. MG Recherches, France)*

Common Infectious Diseases (CID), defined as upper and lower respiratory tract infections and gastroenteritis, are a main cause of morbidity and mortality in the elderly. The aim of the present study was to assess the effect of a specific fermented dairy product, Actimel®, containing a probiotic strain Lactobacillus casei DN-114 001, on the resistance to winter CID in elderly. The study was a double blind, randomized, controlled, multi-centric trial, including 1072 autonomous elderly of both sex, aged over 69. Subjects consumed 2 bottles/day of Actimel® or a control product for 3 months. On the primary criteria, i.e. the cumulated number of all CIDs (respiratory or gastro-intestinal) during the 3-months product consumption, the results showed a rate reduction of 10,6% in Actimel® group, nevertheless the difference was not statistically significant. However the duration of CIDs (for all CID) was significantly reduced in Actimel® group compared to the control one. This was observed either on the mean or cumulated duration of all CID (Actimel® group = 6.5 to 7 days versus control group = 8 days; p<or=0.009). Moreover Actimel® significantly reduced the duration of Upper Respiratory Tract Infections especially rhinopharyngitis (p<0.001). This effect was associated with a significant increase of the amount of Lactobacillus casei species in the stools in Actimel® group during the product consumption phase that reached a level of 107 bacteria/g stools (p<0.001). In conclusion, this study demonstrated the effect of Actimel® in reducing the duration of CID especially respiratory and its capacity to improve the health of elderly.

P28.02 NASOGASTRIC TUBE SYNDROME - A POTENTIALLY LIFE-THREATENING COMPLICATION IN TUBE-FED PATIENTS. E.-L. MARCUS[1], Y. CAINE[1], H. KASEM[2], M. GROSS[2] *(1. Department of Acute Geriatrics, Herzog Hospital, Jerusalem, Israel; 2. Department of Otolaryngology/Head and Neck Surgery, Hadassah Hebrew-University Hospital, Jerusalem, Israel)*

Background: Nasogastric tubes (NGT) are used in frail older adults for enteral nutrition. In those patients dyspnea is usually attributed to aspiration, pulmonary embolism, or congestive heart failure. The possibility of upper airway obstruction is frequently underestimated. NGT syndrome is a rarely-reported entity that may cause life-threatening upper airway obstruction. The NGT presses against the posterior cricoid lamina on which the posterior cricoarytenoid muscles lie, and the pressure generates post-cricoid

ulceration and inflammation that can penetrate the muscles and cause vocal cord abduction paralysis. Diagnostic criteria for NGT syndrome are (i) throat pain, (ii) presence of NGT, and (iii) vocal cord paralysis. Once the syndrome is suspected, a fiberoptic laryngeal examination should be performed. This study aims to report all cases of NGT syndrome diagnosed during the period January 2006-April 2008 in a long-term care facility. Results: During this period 8 cases with NGT syndrome were diagnosed: 6 males, 2 females, age range 50-90 years. In 4 cases diagnosis was made while weaning from a tracheotomy tube. Only 3 patients were cognitively intact and they complained of throat pain, shortness of breath and dyphagia. After appropriate treatment, including removal of NGT and administration of steroids, anti-reflux therapy and performance of tracheotomy as needed, recovery was noted. Conclusions: NGT syndrome should be considered in the differential diagnosis of patients with NGT and dyspnea, especially in frail older adults. This syndrome may present a spectrum of manifestations in which many less severely affected individuals may benefit from early diagnosis and appropriate management.

P28.03 OXYGEN THERAPY: A PROSPECTIVE AUDIT IN PATIENTS PRESENTING WITH BREATHLESSNESS. S. MUKHERJEE, K. GOUPAL, A. JUSZCZAK *(East Kent NHS Trust, QEQM Hospital, Margate, Kent, United Kingdom)*

Background: Patients including Elderly, presenting with acute breathlessness benefit from oxygen therapy, if correctly prescribed. The aim of this audit was to confirm that oxygen therapy is prescribed in line with British Thoracic Society and NICE guidelines. Methods: 50 consecutive patients,(29 patients over 60 years), admitted with breathlessness were included in the study. Analysis of demographic data, diagnosis, Arterial Blood gas, saturation, Oxygen therapy and Non invasive ventilatory support was identified including progress and outcome. Results: 26 male and 24 female patients (age range 40-91 years), were admitted with diagnosis of COPD with or without CCF, LRTI, LRTI, asthma and CCF. ABG were done in 45 patients, with PaO2 less than 8 in 44 patients. Respiratory failure, Type 1 and 2 and with acidosis were present in 25 patients. Diagnosis: COPD 19% COPD with CCF 19% LRTI 16% Asthma 5% CCF 8% Oxygen saturations Below 84% - 26% 85-89% - 26% 90-94% -24% Above 95% -10% Not recorded -14% Oxygen therapy 24% - 18% 28% - 34% 35% - 24% Above 40% -26% BIPAP and CPAP -32%. Conclusions: Most patients including elderly benefited from Oxygen therapy. COPD with or without respiratory tract infection was the commonest presentation in elderly. Hospital stay was prolonged in patients on BIPAP/CPAP. Oxygen usage in 8 pts (16%) was inappropriate. Elderly patients usually presented with multiple co morbidity and did not tolerate BIPAP/CPAP well. Discharge planning in the elderly in COPD is important for safe and effective management.

P28.04 PULMONARY REHABILITATION FOR ELDERLY PATIENTS-EXPERIENCE FROM EAST KENT, UK. S. MUKHERJEE *(East Kent NHS Trust, QEQM Hospital, Margate, Kent, United Kingdom)*

Objectives: Respiratory diseases including COPD are an important cause for acute admissions in Elderly people. Pulmonary rehabilitation is now an important part of COPD management. We describe the Pulmonary Rehabilitation programme which we have set up in the day hospital to specifically help elderly patients' safe facilitated discharge as part of chronic disease management. Methods: The programme is administered over a six week period by a multidisciplinary team of Physiotherapists, Nurses and Occupational therapists. Consultant Geriatrician is involved in initial case selection and assessment of progress. Therapy led assessment is carried out at three months post completion of programme. Access to this programme is through local general practitioners, community respiratory teams and hospital consultants. Domains covered during the programme include education on COPD and inhaler techniques, advice about smoking cessation, importance of exercise, breathless positions, sputum clearance and breathing exercises and lessons on Anxiety/Panic attack management. Patients are regularly monitored by spirometry and assessments for depression and Canadian Occupational performance measure. Results: This programme is now successfully running since 2005. Elderly patients, including their family and caregivers, have found this programme very rewarding. Drop out rate is below 5%. This has now been linked to Community Respiratory services, home nebuliser assessments and Oxygen assessments to provide a comprehensive respiratory service for older people. Conclusions: Pulmonary rehabilitation services targeting older people are key to chronic respiratory disease management. Linking services in hospital with primary care is a key feature and multidisciplinary involvement is an essential requirement for successful implementation.

P28.05 MORTALITY ASSOCIATED FACTORS IN HOSPITALISED GERIATRIC PATIENTS WITH PNEUMONIA. E. ROMERO, C. FERNANDEZ, M. RAMOS, E. GONZALEZ, M. FUENTES, J. MORA, J. MARTIN, J.M. RIBERA *(Hospital Clinico San Carlos, Department of Geriatrics, Madrid, Spain)*

Aims: to study the mortality associated factors in a sample of elderly patients admitted to an acute geriatric ward with diagnosis of pneumonia. Patients & Methods: descriptive analysis of all pneumonia patients admitted during a 2-year period. Sociodemographic characteristics, clinical, functional, cognitive and social status were gathered. The statistical analysis consisted of univariate and multivariate tests with a significance level p<0.05. SPSS 12.0. Results: n: 452, age 85.8; 51.8% men. In-hospital mortality: 38.1%. Mortality associated factors: 1) Basal data: aspiration (relative risk RR 2.40), Charlson Index (ICh) >3 (RR 2.21), dyspnoea at rest (RR 1.92); all of them p<0.001. 2) Admission: hypoxemia (p=0.047, RR 1.33), fever (p=0.020, RR 1.33), chest X-ray infiltrate type (bilateral>right>left) p<0.001, hemodynamic instability (p<0.001, RR 2.34), dyspnoea (p<0.001, RR 2.81), need of artificial nutrition (p=0.004, RR 1.62), cholesterol <100 (p<0.001, RR 2.11). Complications: heart failure (p<0.001, RR 2.91), acute coronary syndrome (p<0.001, RR 2.71). 3) Functional status: Katz Index [3] D (p=0.002, RR 1.53), Barthel<60 (p=0.026, RR 1.65), dementia (p=0.044, RR 1.29). No significant differences were found between death and social variables. Multivariate analysis showed ICh >3 (RR 1.84), aspiration (RR 1.58), hemodynamic instability (RR 2.19), heart failure (RR 1.72) and cholesterol <100 (RR 1.90) as independent associated factors of mortality. Conclusions: In a selected sample of elderly geriatric hospitalised patients, not only clinical presentation and complications of pneumonia are relevant to predict hospital mortality, but psychic and functional variables have to be considered in building stratification risk.

P29 SOCIAL GERONTOLOGY

P29.01 HEALTH WORKERS' FEELINGS AND NEEDS ABOUT THE ABUSE ON ELDERLY LIVING AT HOME. N. BERG[1,2], M. VANMEERBEEK[3], A. MOREAU[1], V. MASSART[3], D. GIET *(1. Centre d'Aide aux Personnes Âgées Maltraitées, Liège, Belgium www.capam.be; 2. Centre Hospitalier du Bois de l'Abbaye et de Hesbaye, Service de Gériatrie, Seraing, Belgium; 3. Université de Liège, Département de Médecine Générale, Liège, Belgium)*

Objectives: Responding a demand from the centre of elderly abused persons (Centre d'Aide aux Personnes Âgées Maltraitées CAPAM) the general medicine department of the Liège University conducted a qualitative research on the elderly abuse performed at home. Methods: A half structured guide of interview concerning the health workers and their feelings and needs when looking after abused elderly people living at home was given to an interviewer. While performing the research, he recorded the nine focus groups chatting about elderly abused (in each group, they were 10 GP, nurses or nurses auxiliary). Results: General practitioners are mostly concerned by financial abuses, on the other hand, nurses and auxiliaries mostly talk about psychological or indifferent behaviours in elderly abused. Everyone talks about family and professional neglects. GP's behaviours are eventually criticised by nurses and auxiliary nurses as well. GP are identified to have the hugest power to react, but they argue not to have time and to lack of means to identify and cope with elderly abuse. So, when called out by nurses or auxiliary nurses, they don't eventually give them satisfying answers. Mixed meetings could be hold to get a better coping and detection of elderly abuse performed at home. Conclusions: Research allowed to sharpen GP's, behaviours, attitudes and specific role according to nurses and auxiliaries in front of elderly abuse and get a better view of the help to bring them.

P29.02 DYNAMICS OF PERSONALITY IN THE PSYCHO-SOCIAL ADAPTATION OF THE OVERALL EMERGENT TYPE IN THE ROMANIAN OLD INDIVIDUALS. A. BOJAN[1], G. ONOSE[2], C. POPESCU[1] *(1. Ana Aslan' National Instituteof Gerontology And Geriatrics, Department for Social Gerontology, Bucharest, Romania; 2. Bagdasar Arseni' Emergency Hospital Physical Rehabilitation, Clinical Department, Bucharest, Romania)*

Adaptation is one of the main characteristics of human personality achieved as progressive expansion in the area of concordance between two types of demand. The internal type refers to what an individual feels he wants to do, whereas the external one is what is expected from an individual, what he needs to do in the context of his relationships) (M.Golu, 1993). When predicting consequences within the adaptive framework, the requirement to take into consideration both situational factors and personality factors is emphasized. The importance of cognitive ability has been also pointed out in that it evaluates and anticipates both external demands (the stressor situation) and strategies used to reduce stress. This study comprising a sample of 143 Romanian old individuals aims to analyze in this age category, specific modalities ensuring valuable resources/abilities to cope with stress. Results obtained showed that study group old people hugely considered as valuable the ' cognitive resources' and hence perceived them as main abilities, on which old individuals count when confronting psycho-traumatizing events. Cognitive resources contribute to positive self-image maintenance with beneficial effects on 'social integration' efficiency through a correct evaluation of 'stressor events' ' intensity and consequences. The more extensive the cognitive resources are, the more reduced the tendency to disproportionate reactions to stressors, is (anxiety as a trait and anxiety as a state). Making cognitive resources valuable confirms the idea that psycho-social adaptation in old people is achieved through assimilation based with preponderance on cognition and a cognitive-motivational element that remains deficient.

P29.03 CHARACTERISTICS OF OLDER ADULTS RECEIVING HOME CARE IN COPENHAGEN. A. BJÖRG JÓNSDÓTTIR[1], K. DAMKJÆR[2], K. ELKHOLY[3], M. SCHROLL[1] *(1. Bispebjerg Hospital, Copenhagen, Denmark; 2. Syddansk Universitet, Institut for Epdemiology, Odense, Denmark; 3. Benediktehjemmet, Valby, Denmark)*

Objectives: To document the fraction of home care clients who need help in IADL, ADL and nutrition and the development during one year, 2001 – 2002. Population: 469 home care clients, selected by stratified (age, area, need of personal care) random sampling from all 67+ year old clients in four home care districts in Copenhagen. Methods: Registered nurses trained in the use of MDS (Minimum Data Set) for Home Care visited the participants three times during one year collecting data as part of the European Aged in Home Care Project (ADHOC). Results: 227 home care clients participated in all three surveys. The fraction of clients without difficulty in IADL fell from 41% to 30% for house keeping, from 49% to 42% for meal preparation, from 59% to 52% for managing their finances, from 52% to 49% for managing their medications, from 33% to 20% for using public transportation, from 16% to 14% for shopping and from 69% to 61% in managing

stairs. 16% of the clients never got out of the apartment. Conclusions: The sample was representative for Copenhagen home service clients. All participant's were in need of help in some aspects. It is important for medical doctors to take into consideration which IADL and ADL difficulties their patients are discharged with and whether they are compensated by assistance from relatives or home care. The results may partly be explained by the participants general health status, medication, mobility, cognition and mood, information which was also documented during the MDS-HC examinations.

P29.04 COLLABORATION BETWEEN RELATIVES OF ELDERLY PATIENTS AND NURSES AND ITS RELATION TO SATISFACTION WITH THE HOSPITAL CARE TRAJECTORY. T. LINDHARDT *(Gentofte University Hospital, Copenhagen, Denmark)*

Background: Little is known about involvement of relatives of elderly patients in acute hospital contexts. They hold valuable knowledge, which may improve care planning and the quality of the hospital care trajectory. Satisfaction among relatives may be an indicator of this. Objectives: To in-vestigate the association between scoring of collaboration and satisfaction among relatives of frail elderly patients. Sample. 156 relatives of frail elderly patients in acute medical and geriatric wards. Methods: A self-report, structured questionnaire covering attributes, prerequisites, outcome and bar-riers for collaboration. Comparisons of demographic and caregiving characteristics of respondents reporting high versus low satisfaction and of dimensions of collaboration were conducted. Multi-variate logistic, stepwise regression analyses examined predictors for low satisfaction with the hos-pital care trajectory. Results: Low level of collaboration predicted low satisfaction. So did feelings of guilt and powerlessness, and being a new caregiver. Women and respondents holding a health education reported low satisfaction significantly more often than others. Conclusion:: Satisfaction with care as a hypothesized outcome of collaboration was supported. Further, guilt and powerlessness were consistently related to low satisfaction, and it is conceivable that increased collaboration between relatives and professionals, assigning relatives influence, may reduce powerlessness and guilt in relatives and thereby indirectly increase their satisfaction. Hitherto, research has mainly focused on relatives as victims and potential clients; this study has focused on relatives as competent collaborative partners in care. A new role for relatives as partners in decision-making rather than passive recipients of information is indicated for the benefit of care quality.

P29.05 THE FACTORS INFLUENCING STATE OF SMOKING OF ELDERLY IN A NURSING HOME. L. OZDEMIR, F. GOZUKARA, C. YUCEL, R. TURK, N. AKDEMIR *(Hacettepe University, Ankara, Turkey)*

Aims: The aim of the study was to determine the use of smoking and the factors affecting elder's smoking habit, living in a Governmental Nursing Home. Methods: Thirty two elder people who live in nursing home and smoke included the study. The study was conducted with 21 elders. The study data was obtained with 'Data Collection Form' and 'Satisfaction with Life Scale' (SWLS), using structured interview. Results: The majority of participants were men and their mean age was 64. The mean starting age of smoking was 28, the mean number of smoking cigarette was 27. Among the most frequent places and time for smoking were all hours of day, every place, and rest room, when getting bored and sad. Over half of the elders were thinking to give up smoking and believing that their life and health were affected negatively by smoking. The statistical analysis showed statistically significant differences between those, smoking more than 21 pieces (SWLS mean. 14.3) and those, smoking less than 20 pieces (SWLS mean. 8.5) ($p<0.05$). Besides starting age of smoking those 15 and lower (SWLS mean. 14.4), 19-39 age group (SWLS mean. 10.4) and upper than 40 years (SWLS mean. 4.5) were statistically significant ($p<0.05$). As to the factors sex and duration of stay in nursing home did not cause a change in the mean of SWLS ($p>0.05$). Conclusions: According to our study those who smoke a lot and start smoke in early age perceived higher life satisfaction.

P29.06 GENDER DIFFERENCE IN THE PREDICTORS OF SUCCESSFUL AGING. S.-M.I. PARK[1], D.-H. KIM[2] *(Study group HAS; 1. Research Institute of Aging Society, Hallym University, South Korea; 2. Department of Social and Preventive Medicine, College of Medicine, Hallym University, South Korea)*

Objectives: This study was conducted to assess the difference of successful aging by age, gender and social economic status in Korean elderly. Successful aging was defined by two dimensions including functional status, including ADL and IADL, and social participation. Methods: This study examined aging successfully in five different age cohorts. In 2007, a representative sample of individuals aged 60-84(449 males and 669 female) living in a community was interviewed as part of the 3rd wave Hallym Aging Study(HAS). HAS is an aging cohort study in Korea, conducted every two years from 2003. Chi-square tests and logistic regression were performed to assess the relationships between socio-demographic characteristics and successful aging determinants. Results: Of all participants, 18.3%(9.1% males and 25.3% females) were judged to have successfully aged in 2007. After adjusting for age and job status, successful aging was significantly associated with family income in females. Compared to those in the lowest income quartile group, higher frequency of successful aging was observed in the second (OR= 1.13, 95% CI 0.66-1.94), third (OR= 1.20, 95% CI 0.66-2.22), and the highest income group (OR= 1.64, 95% CI 1.20-2.62), respectively. However, among males, successful aging was not associated with income levels. Conclusions: There was a distinct gender difference in the association between successful aging and family income levels. Higher income levels significantly affected the frequency of successful aging among females but not males. Further researches are needed to clarify why income level affected successful aging among female elderly.

P29.07 OLDER' VERSUS 'ELDERLY'- COMPARING TRENDS IN GENERAL MEDICAL RESEARCH JOURNALS AND GERIATRIC MEDICINE JOURNALS OVER A RECENT TEN YEAR PERIOD. N. QUINLAN, D. O'NEILL *(Adelaide and Meath Hospital, Dublin, Ireland)*

The purpose of the work is to demonstrate the trends in four renowned geriatric medicine journals and four major general medical journals with regard to the usage of the word "Elderly" and variations of "Older Persons" in articles in a recent ten-year period. Older people have repeatedly expressed their desire to be addressed in respectful terms i.e. older or senior and have clarified this in a Europe-wide survey and the UN Human Rights Commission have outlined clearly why the descriptor 'older' should be used in the International Covenant on Economic, Social and Cultural Rights. We performed internet searches on the Advanced Search pages of the Journal of the American Geriatrics Society, Age and Ageing, Journals of Gerontology Series A, the International Journal of Geriatric Psychiatry, BMJ, JAMA, NEJM, and the Lancet. We searched in the Title and/or Abstract sections (where available) over the period January 1996 to January 2006 for the single word "elderly" and the phrases "older persons", "older humans", "older adults" and "older persons". It is clear from our results that 3 of the 4 geriatric journals continue to favour "elderly" over "older" when accepting publications. Only the Journal of the American Geriatric Society has editorial trends that seem to listen to its target patient group. Interestingly the International Journal of Geriatric Psychiatry and the major medical journals included in this study maintain a strong trend towards "elderly" at an average of approximately three times the frequency of "older".

P30 STROKE

P30.01 CHANGING PATTERNS OF RISK FACTORS AND OUTCOMES IN AN IRISH STROKE PATIENT POPULATION. N. CAFFREY, M.-T. LONERGAN, S. TRAINOR, L. GOWRAN, M. FALCONER, N. CARROLL, C. DWYER, T. COUGHLAN, D. O'NEILL, D.R. COLLINS *(Adelaide & Meath Hospital, Dublin, Ireland)*

Improved acute treatments, secondary prevention, public health measures and recent demographic and economic changes in Ireland may alter risk factors and outcomes in a stroke patient population. We sought to compare patterns of stroke subtype, risk factor profile and outcome in patients presenting between 1997-1999 and 2006-2008 to the stroke service in Tallaght Hospital. Comparative analysis of Stroke-Service database 1997-1999 and 2006 and 2008. Between 1997 and 1999, 193 acute strokes were admitted to the stroke service (51% male), mean age 67.8 yrs. 79% were cerebral infarctions, 16% Intracerebral bleeds and 5% due to subarachnoid bleeds/other causes. 65% were discharged home, 21% to institutional care and 14% died. Between 2006 and 2008 a total of 379 patients were admitted with stroke (48.8% male), mean age 67.8yrs. 85.7% were cerebral infarctions, 14.2% haemorrhages. 75.4% were discharged home (a quarter with supported care packages), 11% went to institutional care, 2% other hospitals and 10.4% died. Comparing major risk factors at presentation for cerebral infarction in the original cohort versus those of 2006/08: 64% versus 52% had hypertension, 41% versus 23% had Ischaemic Heart Disease, 34% versus 32% were current or ex-smoker, 34% versus 25% had atrial fibrillation, 15% versus 13% had significant carotid stenosis, and 19% versus 14% had Diabetes. Risk factor profiles show some differences particularly a trend towards less cardiac disease at presentation. There is a trend towards lower death rate and less admission to institutional care, possibly reflecting less co-morbidities and more availability of home care packages.

P30.02 GIVING ADVICE TO PASSENGERS FLYING AFTER A STROKE. K. GIVEN, D. O'NEILL, D.R. COLLINS *(Stroke-Service / Age-Related Health Care, Adelaide & Meath Hospital, Dublin, Ireland)*

Stroke Physicians are often asked to advise about flying after stroke. Little published evidence or guidelines to reference. We assessed frequency for request, nature and basis for the advice given. Methods: Questionnaire and e-survey of Irish and UK geriatricians and neurologists involved in stroke care. Results: 105 replies from consultants managing stroke patients. 51% replies geriatricians. 18% respondents asked for advice weekly, 42% monthly, 37% less often (3% never). After a stroke 8% respondents recommended no flying within a week, 22.4 % within a month, 55.1% 2-3 months, 12.2 % no flying for 6 months. 44.7 % would allow flying sooner after a TIA. 34% differentiate between short and long haul flights. 53.3% base their advice on experience / colleagues, 13.3% on literature, only 6.7 % quoting airline sources for advice. 70% routinely give additional advice to patients flying after ischaemic stroke; prophylactic LMWH (8.9%),increased dose of antiplatelet (6.7%), maintaining hydration (86.7%), alcohol avoidance (66.7%), anti-thrombotic stockings (42.2%), exercising limbs (73.3%). 31.1 % respondents gave non-medical advice mainly about travel insurance . Only 13% respondents aware of patient suffering stroke while flying, 6.7% having airborne complication post-stroke, 46.7 % aware of patient difficulty getting travel insurance after stroke. Conclusions: Survey shows this is a common request for advice. Most recommend no flying for 1-3 months and mainly base advice on experience and colleagues. 70% give additional medical advice when flying. Many aware of travel insurance difficulties for patients after a stroke. There is need for consensus guidelines.

P30.03 THE CANADIAN OCCUPATIONAL PERFORMANCE MEASURE(COPM) USED AS BASE FOR A LIFESTYLE PROGRAMME IN HOME DWELLING ELDERS WITH STROKE OR TIA. A. LUND[1], M. MICHELET[1], I. KJEKEN[2], T.B. WYLLER[1], U. SVEEN[1] *(1. University of Oslo, Ullevaal University Hospital, Oslo, Norway; 2. Diakonhjemmet Hospital, Oslo, Norway)*

Background: Cerebral stroke is a common disease among older people. In Norway, 60-70,000 people live with sequelae after stroke, of which 20 to 60 percent are estimated to suffer from depressive symptoms, anxiety and social isolation. Little is known about effective interventions for stroke patients with mild neurological symptoms who perceive social isolation, depression and reduced satisfaction in their daily lives. In an ongoing multicentre randomized controlled trial, we evaluate the effect on thriving, activity and social participation of a lifestyle programme for community dwelling elders with mild stroke or TIA. The study is planned to include 140 participants; 70 in each of the two arms. Participants are recruited from five hospitals and the intervention is carried out at six senior centres. All participants receive physical activity at the senior centre once a week. In addition the intervention group participates in the Lifestyle programme, once a week for nine months. Methods: The Canadian Occupational Measure (COPM) is applied as one of the main outcome measures to evaluate qualitative as well as quantitative aspects of occupational performance and occupational needs of the individual participant within the three areas of self-care, productivity and leisure. The COPM is conducted as a semi structured interview followed by scoring of up to five prioritised activities for Performance and Satisfaction. Results: The first interviews demonstrate a great variety of activities which the respondents perceive as important in their daily lives. Further results from semi-structured interviews by the Canadian Occupational Performance Measure at baseline will be presented.

P30.04 INTEGRATED STROKE CARE. R. MEADE, S. ANNISS, A. KACHHIA *(Acute Stroke Services, Kettering General Hospital, United Kingdom)*

Introduction: Stroke causes significant morbidity and mortality in the UK; affecting approximately 200 per 100,000 population and accounting for 11% of all deaths. We conducted a retrospective case review to assess whether stroke services in a district hospital are meeting current Royal College of Physicians (RCP) stroke guidelines. Methods: Patients were included if they were seen on the acute stoke unit or acute neurovascular clinic over a one month period. 46 patients were included who were diagnosed or investigated for stroke. Data was assessed for time to hospital, diagnosis, imaging, and assessment on the acute stroke unit. Results: Median time for hospital admission was 7.1hours, with 69% of patients being outside the 3hour window for thrombolysis ($p<0.0005$). Only 39% of patients' achieved the 24hour target for diagnostic imaging (mean 29.6hours) ($p<0.0005$). Patients waited on average 41.9hours to arrive on the acute stroke unit. Conclusions: Given the significant morbidity and mortality, all patients in the UK should have access to high quality stroke services and should not be disadvantaged by the area in which they live. Therefore, if thrombolysis is to be achieved within a district general setting, then the current service must be improved. A unified "stoke pathway" must be created to streamline both pre-hospital and in-hospital admission and neuro-radiological imaging. Such provision is essential to reduce morbidity and mortality and improve health throughout the UK.

P30.05 COMMUNITY-BASED OLDER ADULTS' KNOWLEDGE OF STROKE WARNING SIGNS AND RISK FACTORS: A POPULATION-BASED STUDY IN IRELAND. A. HICKEY[2], A. O'HANLON[2], H. MCGEE[2], E. SHELLEY[2], F. HORGAN[2], D. O'NEILL[1] *(1. Adelaide and Meath Hospital, Dublin, Ireland; 2. Royal College of Surgeons, Dublin, Ireland)*

Context: Stroke is a leading cause of death and functional impairment, yet the most preventable of all neurological diseases. While older people are particularly vulnerable to stroke, previous studies suggest that they have the poorest awareness of stroke warning signs and risk factors. Objectives: To examine knowledge of stroke warning signs and risk factors among community-based older adults. Participants: Randomly selected community-dwelling older people (aged 65+) in Ireland (n=2,033; 68% response rate)involved in the first Irish longitudinal study on ageing. Participants completed home interviews. Main Outcome Measures: Knowledge of important stroke warning signs and risk factors. Results: When asked to identify warning signs for stroke, almost one-third of participants either had difficulty understanding the question (18%) or responded that they did not know (13%). There were considerable gaps in awareness of risk factors and warning signs. Conclusions: One in ten older Irish adults may not recognize early symptoms of stroke in themselves or others. Thus, they may lose vital time in presenting for medical attention. The lack of public awareness about stroke warning signs and risk factors must be addressed as one important contribution to reducing mortality and morbidity from stroke.

P30.06 EATING AND SWALLOWING PROBLEMS DUE TO COGNITIVE DYSFUNCTION AFTER STROKE. A. OSAWA[1], S. MAESHIMA[2] *(1. Royal Rehabilitation Centre Sydney, University of Sydney, Ryde, NSW, Australia; 2. International Medical Center, Saitama Medical University, Japan)*

Objectives: Stroke patients, especially who are aged, have mostly eating and swallowing problem because of not only their physical disability but also cognitive dysfunction. However there are few reports about the problems on the anticipatory phase for stroke patients. We examined the relationship between eating and swallowing function and cognitive function for the elderly patients after stroke. Subjects and Methods: Subjects were 31 patients with strokes aged between 65-101 years including 24 males and 7 females. We assessed general cognitive function using Mini-mental state examination and checked presence of cognitive dysfunction such as aphasia, apraxia, and attention disorders. Additionally, Videofluorography was performed to assess eating and swallowing function. Results: The problems on anticipatory phase were found in 27 patients (87.1%) including 24 with dementia, 13 with aphasia, 6 with apraxia or agnosia and 16 attention disorders. Problems on oral preparatory phase and on pharyngeal phase were significant difference between patients with problems and patients without problems on anticipatory phase. Patients with aspiration were 8 and 7 patients (87.5%) of them had the problems on anticipatory phase. Conclusions: A lot of stroke patients had not only swallowing problems but also cognitive dysfunction related to problems on anticipatory phase. We supposed that we have to evaluate eating and swallowing function in detail for the aged patients with cognitive dysfunction after stroke.

P30.07 ASSOCIATION BETWEEN OBSTRUCTIVE SLEEP APNEA SYNDROME AND RISK OF ACUTE ISCHEMIC STROKE. Y. SAWAYAMA, S. MAEDA, H. OHNISHI, M. HAMADA, S. OTAGURO, N. FURUSYO, J. HAYASHI *(Kyushu University Hospital, Department of General Medicine, Fukuoka, Japan)*

Previous studies have suggested that obstructive sleep apnea syndrome (OSAS) may be an important risk factor for stroke, but data on the relationship between OSAS and ischemic stroke subtypes. Therefore, we investigated the relationship between OSAS and acute ischemic stroke subtypes. We performed a case-control study among 41 patients with their first acute ischemic stroke, matched for age and sex with controls from asymptomatic outpatients with hyperlipidemia at the same hospital. The diagnosis of the OSAS was based on apnea/hyponea index (AHI) of 15 or higher ; patients with AHI of less than 15 served as the controls group. A total of 41 acute ischemic stroke patients and 41 controls were included (aged 41 to 81 years). The primary outcome measure, (the AHI, measured during overnight polysomnonograhy and scored blind to case-control status), was grater in the cases (36/hour) and controls (20/hour, $p<0.0001$). Moreover, in the stroke subtypes, the AHI was found in 28 (41/hour) patients with small artery occlusion, 8 (28/hour) patients with large artery atherosclerosis, and 5 (17/hour) patients with cardiogenic embolism. OSAS was associated with a higher risk of stroke due to small artery occlusion and large artery atherosclerosis than a lower risk of cardioembolic stroke. Overall, OSAS was associated with ischemic stroke. Our results suggest that OSAS may act as a trigger that increases the risk of acute ischemic stroke.

P30.08 FEATURES OF ELDERLY DIABETIC PATIENTS IN A MEDIUM-STAY STROKE REHABILITATION PROGRAMME. A. TRUYOLS BONET[1], L. VICH MARTORELL[1], A. GALMÉS TRUYOLS[2], F. ALBERTÍ HOMAR[1], J. CARBONERO MALBERTI[1], F. PALACIOS HUERTAS[1] *(1. Hospital General de Mallorca - GESMA, Palma de Mallorca, Spain; 2. Servei d'Epidemiologia - Govern de les Illes Balears, Spain)*

Objectives: To estimate the prevalence of diabetes mellitus (DM) in elderly included in a stroke rehabilitation programme and the prevalence of vascular risk factors (VRF), complications and outcomes in DM patients. To compare the principal features between diabetic and non-diabetic patients. Methods: Transversal study, inpatients older than 64 in a medium stay stroke unit, 2003-2007. Variables studied: VRF, ischemic stroke (IS), lacunar stroke, affected territory in IS; neurological status at admission (NIH scale), complications (respiratory, urinary, recurrent stroke, confusion, depression) and outcomes (mortality, Barthel index at discharge Bid, corrected Heinemann index Hic, functional gain FG). Comparison of means: t-Student test; of proportions: z test. Results: Patients included: 252. Prevalence of DM: 37.7%. In DM patients: mean age 76.3 (DT 6.74), men 54.3%; mean of VRF 3.51 (DT 1.36); HTA 78.8%, obesity 36.2%, dyslipemia 35.1%, AF 24.5%, previous stroke 34%; IS 89.4%; lacunar 21.7%; carotid territory 71.3%; NIH 7,8 (DT 5.26); mean of complications 0,81 (DT 1.05), recurrent stroke 6.4%, respiratory infection 9.6%, urinary infection 17%, confusion 24.5%, depression 33%; mortality zero, Bid 51.2 (DT 28.1), Hic 45,1 (DT 31.5), FG 27.7 (DT 19.8). Differences between DM and non-DM: VRF (3.51 vs 1.36, p 0.0000), IS (89,4 v 75,9, p 0.01) and carotid territory affected (71,3 vs 93, p 0.0000). Conclusions: DM is a frequent VRF, associated often to other VRF. There are diferences in type of stroke and afected territory. The presence of DM hasn't shown as a bad pronostic factor in included in our rehabilitation programme.

P30.09 ASSOCIATION BETWEEN APOE E4 AND COGNITIVE IMPAIRMENT AFTER STROKE. J. WAGLE[1,5,6], L. FARNER[1,5,6], K. FLEKKØY[6], T. BRUUN WYLLER[1,6], L. SANDVIK[2], K. EIKLID[3], B. FURE[6], B. STENSRØD[6], K. ENGEDAL[1,4] *(1. University of Oslo, Faculty of Medicine, Oslo, Norway; 2. Centre for Clinical Research, Ullevaal University Hospital, Oslo, Norway; 3. Department of Medical Genetics, Ullevaal University Hospital; 4. Norwegian Centre for Ageing and Health, Ullevaal University Hospital; 5. Norwegian Centre for Ageing and Health, Specialist service in psychiatry, Vestfold; 6. Department of Geriatric Medicine, Ullevaal University Hospital)*

Background and Purpose: The understanding of genetic factors' contribution to cognitive impairment after stroke is incomplete. The aim of the study was to examine whether the Apolipoprotein E ε4-allele (ApoE ε4) is a risk factor for cognitive impairment in the early phase after stroke. Methods: The sample comprised 152 Norwegian stroke rehabilitation in-patients (mean age 76.8, s.d. 10.5) examined at a mean of 18.3 days (s.d. 13.4) after hospital admission. Post stroke cognitive impairment was assessed with the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS). The following proposed risk factors were analysed: ApoE-genotype, demographics (age, sex,

education), pre stroke cognitive reduction, (the Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE)), pre stroke vascular factors (including previous stroke), stroke characteristics (type, location), and neurological stroke-related impairment (The National Institute of Health Stroke Scale (NIHSS)). Cognitive impairment was defined as a RBANS Total Index Score ≤1.5 s.d. below mean. Multiple logistic regression analyses were performed to find risk factors for post stroke cognitive impairment. Results: Four variables were found to be independent risk factors for cognitive impairment after stroke: ApoE ε4 (OR=3.5; 95% CI 1.1-10.8), IQCODE 3.44+ (OR=9.3; 95% CI 2.3-37.8), total or partial anterior stroke syndromes (OR=3.0; 95% CI 1.2-7.4), and NIHSS Total score>5 (OR=7.0; 95% CI 2.6-19.1). No association between ApoE ε4 and pre stroke cognitive reduction (IQCODE) was found. Conclusions: The presence of one or two ApoE ε4-alleles may be a significant independent risk factor for cognitive impairment in the early phase after stroke.

P31 MISCELLANEOUS

P31.01 THE IMPACT OF HERPES ZOSTER AND SUBSEQUENT CHRONIC PAIN ON PATIENTS' DAILY LIVES. B. ARNOULD[1], R. BARON[2], J.L. GALLAIS[3], P. GINIÈS[4], K. BENMEDJAHED[1] *(1. Mapi Values, Lyon, France; 2. Schleswig-Holstein University Hospital , Kiel, Germany; 3. General Practice, Paris, France; 4. Saint Eloi Hospital, Montpellier, France)*

Objectives: To carry out a literature review and develop a conceptual model illustrating the domains of patients' lives that are impacted by herpes zoster (HZ) and subsequent chronic pain. Methods: Biomedical databases and online congress archives were searched using keywords related to HZ or post-herpetic neuralgia (PHN) and social, psychological or physical impact. Articles containing concepts reported by patients were retained. Links between concepts were documented on three levels; hypothesis, observation and evidence. Wilson and Cleary's Model was used to organise the findings. The final model illustrates the concepts impacted by HZ and PHN, relationships between these concepts and the level of evidence identified. Results: 733 abstracts were retrieved and reviewed. 29 publications were retained for the conceptual model. The concepts identified from the articles were grouped into the following domains: Biological/Physiological, Symptom Status, Functional Status, Social Status, General Health Perceptions, Characteristics of the Individual, Overall Quality of Life, Treatment, Characteristics of the Environment and Other Disorders. Evidence demonstrated that HZ-related pain directly impacts Functional Status, Social Status, Health Perception and Overall Quality of Life. Conclusions: Patients report that all major domains of life are impaired by HZ or subsequent chronic pain. Age is a well-recognised risk factor for increased incidence and severity of HZ and PHN. HZ and its painful and debilitating complications may have a substantial impact on physical, psychological, social and role functioning, quality of life and activities of daily living, and thus threaten patients' independence.

P31.02 TRANSPORTATION AND DRIVING IN LONGITUDINAL STUDIES ON AGEING. M. BARTLEY, D. O'NEILL *(Adelaide and Meath Hospital in corporating the National Childrens Hospital, Department of Age Related Health Care, Dublin, Ireland)*

Background: Demographic trends predict that older people will constitute a larger share of the driving population in the future, and will have more complex transport requirements. The associations between transportation, driving and successful ageing are as yet po orly understood. As longitudinal studies are the best methodology for clarifying associations and relationships between health, ageing and environmental factors, we sought to determine the degree to which transportation is incorporated into longitudinal studies, and which aspects of transport are assessed. Methods: Of 55 international longitudinal studies on ageing on the National Institute on Aging register, online survey instruments, where available, were scrutinized for references to transport: where these were not available, principal investigators of each study were contacted by mail/email/phone and asked to forward the relevant questions on transportation and driving. Questions were classified into a) Systems, b) Resources, c) Transport Satisfaction, and d) Mobility needs. Results: Of 55 studies, we were able to review 36 questionnaires (28 personal replies, 8 accessible online survey instruments). Sixteen had no reference to driving or transportation, and 22 (61%) had a public transport component and 11 (31%) included questions about driving. Questions covered systems (15), transportation needs (11), Transportation resources (9), and Transportation Satisfaction (4) . Conclusions: Transport is under-represented in ongoing longitudinal studies on aging, with emphases on public transport, and systems and resources, rather than driving and satisfaction with transportation. Future waves of studies could usefully review their survey instruments to better measure older people's preferences on transport options and satisfaction.

P31.03 "DAS ANDERE MUSEUM". C. HÜRNY, B. BRACK *(Kompetenzzentrum Gesundheit und Alter, St Gallen, Switzerland)*

1999, in the International Year of the Elderly „das andere Museum" was founded in the Geriatric Competence Center in St. Gallen, Switzerland, including a 88 bed Geriatric Hospital with Day Clinic and Memory Clinic, a Nursing Home and Residences for Senior Citizens. "das andere Museum" is a somewhat different museum. It is not restricted to a place, it is an idea. In caring for elderly people, the professionals are often confronted with the difficult sides of becoming and being old: frailty, illness, restrictions, losses, dying and death. Even if geriatric caring is focussing on resources, the creative sides of old age may easily be overlooked. In 2005 we were nominated for the "IBK Price (International Conference of Lake Constance)" for our joint exposition with the Museum im Lagerhaus: love declaration to life – young power in old age. The exposition in cooperation with the Museum im Lagerhaus 2007 "smirking wisdoms" of John Elsas was another highlight. In the last nine years, the goals of "das andere Museum" to create a podium for old people and to serve as their speaking trumpet in public, to foster the exchange between the generations and to demonstrate to our staff the creative sides of old age, have been reached to a good proportion and our work goes on. "das andere Museum" may play an important role in the prevention of burn-out.

P31.04 MALARIA IN THE ELDERLY PRESENTING AS TRANSIENT ISCHAEMIC ATTACK(TIA). S. MUKHERJEE *(East Kent NHS Trust, QEQM Hospital, Margate, Kent, United Kingdom)*

Objectives: Case report describing unusual presentation of malaria in an elderly patient as transient ischaemic attack(TIA). Methods: 78 year old Caucasian patient presented to the Medical Admission Unit with a history of confusion, lower limb weakness and slight temperature one day prior to admission. Social history. He lived on his own and was active and his ADL was 19/20. He was independent in all his activities prior to this admission. Initial diagnosis was of possible TIA and/or Urinary tract infection. He was seen on the post take ward round by the Consultant and at that time was quite incoherent and was repeating a street name in Kolkata, India. Provisional diagnosis of Malaria was made and thick and thin blood films were sent. Results: Malaria parasites(plasmodium vivax) were found on blood film. He was treated with anti malarial tablets and made uneventful recovery. On further questioning, he admitted to travelling through Burma (Myanmar) and India for six weeks prior to illness. He had run out of malaria prophylaxis tablets in the later part of his journey. He had returned to England two weeks prior to this incident. Conclusions: Elderly people from Western countries are travelling more and more in the world including tropical countries. Tropical infections including malaria must be considered in the differential diagnosis of people with sudden onset of confusion and features mimicking TIA. Adequate prophylactic drugs are necessary and essential during travel period. Examination for malaria parasites is essential for correct diagnosis and management.

P31.05 PATIENT UNDERSTANDING OF DISCHARGE DIAGNOSES: PREVALENCE AND PREDICTORS. D. NI CHROININ[1], S.F. SYED FAROOQ[1], M. BURKE[1], J. DUGGAN[1], D. POWER, L. KYNE[1] *(1. Mater Misericordiae University Hospital, Dublin, Ireland; 2. St. Mary's Hospital, Phoenix Park, Dublin, Ireland)*

Every patient has a right to understand their diagnosis. This contributes to the patient's feeling of empowerment. It allows fuller participation in decisions regarding treatment, and may augment compliance. Only 40% of patients recalled their discharge diagnosis in previous studies, and understanding was sub-optimal. We contacted all medical patients discharged from a large urban hospital over a 30-day period, to establish (1) level of understanding, (2) perception of understanding, and (3) satisfaction with explanation received. We examined patient factors potentially influencing understanding, including age, gender, cognition, and whether resident at home or in extended-care. 452 medical discharges were included in the analysis. We successfully surveyed 336 (74.3%). Mean age was 62.9years (SDP 18.1). 184 (54.8%) were female. 243 (72.3%) patients had good understanding of their primary discharge diagnosis, i.e. could identify and/or explain the pathology. Older age (>65 years) was significantly associated with poor understanding ($p=0.0001$), even corrected for cognitive impairment ($p<0.05$). Gender and place of residence didn't significantly affect understanding. 258 (76.8%) patients felt they understood their diagnosis. 273 (81.3%) asserted their diagnosis was explained during their stay, 268 (79.8%) that it was re-clarified at discharge. Poor cognition significantly impaired understanding ($p<0.001$), and also perception of whether the diagnosis had been explained ($p=0.0001$). While most patients understood their diagnoses well, even small mis-understandings may affect a patient's approach to health behaviours. Cognitive impairment may lead to difficulty absorbing information, and affect treatment and medication compliance. High-risk patients should be identified and offered additional assistance prior to and following discharge.

P31.06 SEQUENCING OF THE PROMOTER REGION AND EXONS 1A AND 1B IN THE HUMAN CALCIUM SENSING RECEPTOR GENE. A. QVIST, N.R. JØRGENSEN, P. SCHWARZ *(Research Centre for Ageing and Osteoporosis, Department of Geriatrics, Glostrup Hospital, Denmark)*

Calcium homeostasis is a very exact homeostasis responding to very small fluctuations in the extracellular calcium-ion concentration. One of the keys to the regulation of this homeostasis is the calcium sensing receptor (CaSR). Mutations in the gene encoding the receptor could thus result in changes of the receptor function leading to changes in the calcium set-point. The aim of this project was to sequence the promotor-region and the untranslated exons 1A and 1B of the CaSR gene, in order to determine whether polymorphism or mutations in these regions are associated to a specific clinical diagnosis involving dysfunction of the calcium homeostasis. DNA from 23 patients had previously been sequenced for mutations in the encoding exon 2 to 7 of the CaSR without detecting an association of mutations to their calcium-metabolic disease. In 15 of these patients, we found a variation in the single nucleotide polymorphism (SNP) rs 9883981: 6 with IGGGI, 3 with IGAGI and 6 with IGG/AGI in the untranslated exon 1B. While an association between one specific polymorphism or mutation to a specific clinical diagnosis was not found. Thus the conclusion according to the results of this project is that a further study of the untranslated region of the CaSR is required to determine an association between

mutations/polymorphism and a specific clinical diagnosis. Even though, it is impossible to make some statements whether anyone of these genotypes are just polymorphisms or a disease-causing mutation until the frequency of these DNA variants has been determined in the background population.

P31.07 CHANGE IN FUNCTION DURING HOSPITALIZATION: A PROGNOSTIC INDEX FOR ELDERLY PATIENTS. I. SLEIMAN[1], R. ROZZINI[1], P. BARBISONI[1], A. RANHOFF[2], M. TRABUCCHI[3] *(1. Department of Internal Medicine and Geriatrics, (Poliambulanza Hospital, Brescia Italy; 2. University of Bergen, Diacon Hospital, Bergen, Norway; 3. atric Research Group, Brescia, Italy)*

Background: older individuals are a heterogeneous population. Clinicians have used measurements of pathological conditions and functional status to capture this heterogeneity for prognostic purposes. However the literature pays low attention to physical functional changes. Methods: In a retrospective cohort, to investigate the association between functional changes during hospitalization and 3 months mortality. 1119 acutely ill elderly patients admitted to a Geriatric Sub-Intensive Care Unit (mean age 80.6±7.8) were subdivided in four groups according to degree of functional decline at admission in comparison with the premorbid level and ability or not to regain function at discharge: with moderate loss (< 30), able to regain (group a) and not able to regain function (group b); with severe loss (> 30), able to regain (group c) and not able to regain function (group d) during hospitalization. Age, gender, cognitive and functional status, serum albumin, Acute Physiology Score, APACHE II score , comorbid conditions, number of drugs and length of stay were collected. Results: Total 3- month mortality was 17.9 %. Mortality rate was 10.7 %, 17.6 %, 14.5 % and 36.7 % in group a), b), c) and d) respectively. A multivariate analysis show adjusted odds ratio = 1.5, 95% confidence interval = 1.0-2.6 for group b); adjusted odds ratio = 2.1, 95% confidence interval = 1.3-3.6 for group d). Conclusions: In acutely ill elderly patients lack of regain of function during hospitalization is associated with higher mortality rate at 3-month compared with those able to regain the baseline functional status

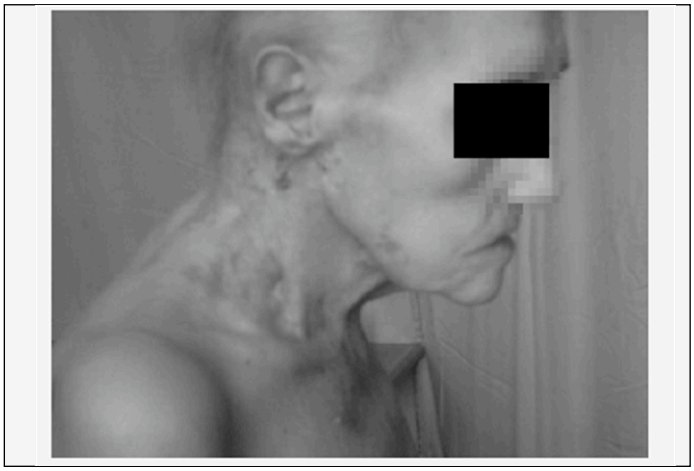
P31.08 FOLLOW-UP HOME VISITS AT ELDERLY PATIENTS AFTER DISCHARGE FROM HOSPITAL. A RANDOMISED, CONTROLLED INTERVENTION STUDY. F. RØNHOLT, H.N. JACOBSEN, L. RYTTER

Objectives: To examine the effect of structured follow up after discharge of elderly people. Methods: Patients in the intervention group received joint structured home visit by GP and nurse from the municipality 1 week after discharge, and consultation or home visit after 3 and 8 weeks. Evaluation was performed by interview at home and a questionnaire to the GPs after 12 weeks and register data after 26 weeks. Organisational situation was evaluated by surveys and focus group interviews. Results: 331 patients aged 78+ discharged from medical or geriatric ward were included. 293 (148+145) completed the study. In a period 26 weeks after discharge the control group patients were more likely to be readmitted (52% vs. 40%. P=0,03). The economic analysis showed that the intervention is cost neutral with a tendency to a socioeconomic gain in favour of the intervention patients with overall savings of 670 Euro per patient in the period of 26 weeks after discharge. Control of the medication significantly improved the GPs knowledge about actual medication taken by the patients in the intervention group. There was a better follow-up on the discharge plan (95% vs. 72% completed planned clinical control, P=0,02, 88% vs. 68% completed planned para clinical control, P=0,1). There were no significant differences between the groups on functional status, self rated health, death and patients satisfaction (except impression of GPs knowledge about patients situation). Conclusions: The intervention shows a possible framework for fragile people to secure follow-up after discharge and reduces the risk of readmission.

P31.09 RAMSAY HUNT SYNDROME. M. SEIDAHAMD, L. AL-DHAHI *(Queens Hospital, Romford, United Kingdom)*

We report the case of an elderly woman who presented with right sided neck rash with clinical manifestation of the reactivation of latent varicella Zoster virus in immunosuppressed patients. Presentation: A 94 years old white woman was brought to our Accident and Emergency department complaining of right sided neck rash that has worsened over two weeks. Initially started as few vesicles on neck which then extend to involve occiput, mandible, anterior chest and Right ear. Patient also had itchy burning pain, and reduced hearing of right ear, associated with reduced appetite and mobility. There was no oral cavity rash. Apart from being in Atrial Fibrillation, maintained on Digoxin and warfarin, there was no other significant medical history. She had no history of viral or any other infection. On examination there was blistering vesicular erythematous rash with golden crusting on pinna of ear extending into external auditory meatus and C2-C3 distribution. She was pyrexial temperature 38.7°. CXR was normal. Investigations included urine and blood culture-no growth after 5 days. Haemoglobin was 10.5g per dl with white blood cells elevated 42.1x109 per litre, platelets normal and lymphocytes elevated with smear cells. The Diagnosis was Shingles C2-C3 with secondary bacterial infection and chronic lymphocytic leukaemia. The patient was started on Acyclovir, benzyl penicillin and flucloxacillin. IgG was 2.98 (5.5-16.5). Intravenous IgG Immunoglobulin infusion was given (0.4/kg/day for 5 days). Two weeks after admission the patient developed right sided Lower Motor Neuron Facial Nerve Palsy, and she was started on a reducing dose of prednisolone, and hypermellose 0.3% eyedops with eye patch. The neuropathic pain relived with Amitriptyline; unfortunately Right LMN Facial palsy persisted despite a course of prednisolone. Discussion: This case presents the considerable morbidity of herpes zoster infection especially in elderly patients. Despite diagnosing the patient early on admission, late presentation with symptoms for more than two weeks definitely had its impact on the outcome. Meta-analysis and randomised controlled trials suggested that the oral antiviral agents started within 72 hours of onset of rash reduce severity and the duration of acute pain, as well as the incidence of post-herpetic neuralgia. The nucleoside brivudin has been shown to be as effective as famciclovir but superior to acyclovir in both healing acute lesions and reducing post-herpetic neuralgia.1 in patients with impaired immunity incidence and severity are increased.2 In this case chronic lymphoid leukaemia was the underlying cause. The post-herpetic neuralgia described as persistence or recurrence of pain more than a month after the onset of zoster, but better considers it after 3 months.3 Moreover the ear pain associated vesicles form of the Ramsay Hunt Syndrome with facial nerve palsy, is caused by inflammation of the facial nerve in particular the Geniculate ganglion. Our patient did not complain of change in taste sensation. Inspite of treating our patient with acyclovir and prednisolone Facial palsy persisted. It is thus of great importance the education of elderly people, about early reporting of any eruption of a rash especially who has had chickenpox, as this can alter the outcome significantly

Figure
Rash on the neck, ear, mandible, and anterior chest; also notice right side facial palsy



P31.10 THE USE OF ANTIBIOTICS IN HOSPITAL GERIATRIC DEPARTMENTS IN ISRAEL-A FOUR POINT PREVALENCE SURVEY. C. VIGDER, Y. BEN-ISRAEL, E. KAYKOV, E. GRANOT, R. RAZ *(Shoham Geriatric Medical Center, Kfar Saba, Israel)*

Background: The excessive and sometimes inadequate use of antibiotics are related to the increase of adverse events, more expensive drugs and the appearance of multidrug resistant pathogens. Aims: The present survey described the use of antibiotics in 14 geriatric centers in Israel. Material-Methods Fourteen geriatric centers in Israel participated in this survey. Four point prevalence were conducted during 10/2005-09/2006. Percent of hospitalized patients receiving antibiotics, type of antibiotics and type of departments were recorded by the same week in all the wards. Results: The use of antibiotics range from 31.6% in the acute wards to 5.5% in the nursing wards. In addition , 18.6% of mechanical ventilated patients, 17.6% of skilled nursing patients and 13.6% of rehabilitation patients received antibiotics. Intravenous antibiotic was prescribed in 48.4% of patients in acute wards and 14.5% of patients in nursing wards. The most frequent antibiotic prescribed was cefuroxime (23.6% of the patients of all departments) ,follow by amoxi-clavulonate and quinolones. A wide variation was seen between the same type of ward in different geriatric centers. Summary: 1. This is the first study conducted in Israel , estimating and comparing the use of antibiotics in hospital geriatric departments; 2. As it was expected, the use of antibiotics in acute care wards was approximately six time more frequently than in the nursing wards; 3. High variability was seen between same departments in different centers

P31.11 IF YOUR LEGS WERE PLANTS, HOW WOULD YOU THEN NURSE THEM? HEALTH COACHING IN ACTION IN THE GERIATRIC FIELD. T. WULFF, C. HENDRIKSEN *(Clinical Unit of Health Promotion, Bispebjerg University Hospital, Denmark)*

Background: Health coaching of elderly people with a high risk of falling is at present being evaluated in a randomised controlled trial. The scope is to engage the elderly people in self-selected health-related focus areas. The coaching approach is unique, and is focusing on enhancing the skills and the creativity that the clients already have. The coaching approach is adapted to the specific needs for elderly people with a risk profile. Methods: Case descriptions from the radomised controlled trial, examplifying in practice how health coaching can serve as a valuable tool, engaging elderly people in health-related topics. The results of the study will be analysed qualitatively and quantitatively, and will be published in 2009. Results: Identification and active use of values and key strengths seem to empower elderly people in selfcare, also when being in a relatively frail state. The coaching approach is very well perceived by the elderly people, who likes to be challenged and championed by a positive coach. Conclusions: Health coaching may be a valuable

supplement to geriatric treatment, and the techniques may be incorporated in current communication forms, when collaborating with elderly people on health-related issues.

P31.12 FACTORS ASSOCIATED TO PRESSURE SORES IN THE ELDERLY. P. ZICCARDI[1], F. CACCIATORE[1], F. MAZZELLA[1], L. VIATI[1], P. ABETE[2], N. FERRARA[3], F. RENGO[2] *(1. Salvatore Maugeri Foundation, Telese Terme, Italy; 2. Cattedra di Geriatria, University of Naples, Italy; 3. Faculty of Medicine, Molise University, Italy)*

Pressure sores (PS) remain a complex and costly problem to the health care system that negatively influence the quality of life. Elderly are at high risk of developing PS when several conditions that could cause long-term bedridden occur. Aim of the study is to assess the PS prevalence (3-4 degree) in elderly population and verify the role exerted by demographic and clinical variables on PS. The analysis was conducted on 1288 elderly subjects randomly selected in Campania, Italy, in 1992. Age, sex, Charlson comorbidity index, severe cognitive impairment, malnutrition, urinary and fecal incontinence, bedridden > 6 months, Frailty assesed by Frailty Staging Sistem and heart failure were considered as covariates. PS were found in 1.4% of the population, prevalence increase with age, 1.0%, 1.7% and 3.1% respectively in subjects aged 65-74, 75-84 and 85 and over ($p<0.05$). In the table are presented data in relation to the presence or absence of PS.(Table 1) Subjects with PS have a higher GDS score (15,2+/-6,2 vs 11,4+/-6,6, p=0,017) and a worse subjectivity health status score (1.61+/-0,17 vs 0,87+/-1,3; p=0.015). Logistic regression analysis demonstrate that only heart failure exerts an independent effect (OR 6,01-95%CI 1,31-23,12;p=0.021). Mortality after 12 years of follow up is 66,7% in subjects with PS in respect to 52,7% of the overall population. The study demonstrate that multidimensional assessment is necessary in patients with PS because of the higher complexity due to the presence of heart failure, cognitive impairment, malnutrition, high degree of frailty and disability, that leads to higher mortality.

P31.13 IS PURPLE URINE BAG SYNDROME A POOR PROGNOSTIC MARKER IN FRAIL ELDERLY PATIENTS? F. RASCHILAS[1], D. ADANE[4], E. OZIOL[2], O. MILLOT[2], C. BOUBAKRI[1], P. HEMMI[1], F. TIGOULET[1], N. FAUCHER[3], H. BLAIN[1], C. JEANDEL[1] *(1. Centre de Gérontologie Clinique, Montpellier, France; 2. Département de Médecine Interne, Centre Hospitalier de Béziers, Béziers, France; 3. Unité de Soins de suite et de Réadaptation, Hôpital Vaugirard-Gabriel-Pallez, Paris, France; 4. Unité de Soins de Longue Durée Pech Dalcy, Centre Hospitalier de Narbonne, Narbonne, France)*

Purple Urine Bag Syndrome (PUBS) is an uncommon event wich affects chronically urinary catheterized patients. When PUBS occurs, the plastic of catheter bags turns to a blue or red color. Since the first description in 1978, many cases of PUBS have been reported and pathophysiology has been partially explained. In our experience, PUBS seems to be associated with a poor outcome. However, until now, clinical significance of PUBS remains unknown. We report here a case-control study of patients with PUBS, searching to assess if PUBS is associated with a poor six-month prognosis in frail elderly patients. During the 2004-2006 period, 18 cases of PUBS were included in the study. These cases were matched to control patients (who were all urinary catheterized for at least 7 days), on sex, age, comorbidities, nutritional status, constipation and functionnal autonomy. We compared the mortality rate at six-months in these two groups. No difference was noted between the two groups for age (84 ± 8.2 and 84 ± 6.6 years respectively) and sex (female/male : 2 and 2.3 respectively). Cases and controls were comparable for dementia, cancer, history of stroke, undernutrition, loss of autonomy and constipation (55.6% and 66.7%, 38.9% and 33.3%, 27.8% and 25%, 88.9% and 91.2%, 55.6% and 45.9%, 55.6% and 54.2% respectively). Mortality-rate at six-months was statistically higher in PUBS patients : 77.8% (14/18 patients), versus 37.5% (9/24 patients) in control group, p=0.009. In our study, PUBS appears as a poor prognostic marker in frail elderly patients, significantly associated with a higher risk of death at six-months. However, the underlying mechanisms wich can explain the occurrence or not of PUBS in such patients remain to be discovered.

P31.14 PREDICTORS OF TWELVE-YEAR MORTALITY IN A COHORT OF HIGH-FUNCTIONING WOMEN AGED 75 YEARS OR OLDER. H. BLAIN[1,2], I. CARRIERE[3], C. BERARD[4], F. FAVIER[5], A. COLVEZ[2] *(1. University Hospital of Montpellier, Department of Internal Medicine and Geriatrics, Montpellier, France; 2. INSERM U500, Montpellier, France; 3. INSERM E361, Montpellier, France; 4. INSERM U780, Villejuif, France ; 5. INSERM CIC-EC, Saint Pierre, France)*

Background: Little is known about the factors contributing to long-term mortality in high-functioning older women. We investigated the independent effects of sociodemographic factors, functional status, and other health related factors, assessed at baseline and during a 7-year follow-up, as predictors of 12-year cause-specific mortality in women aged 75 or older in apparent good health. Methods: 1547 women were examined in 1992 or 1993 and followed every year by mail until the end of 2000 in one of the five centers of the EPIDOS study. Results: Independent baseline predictors of mortality before January 1, 2004, were lower balance, coordination and mobility, a waist circumference < 92.5 cm, a poor self-perceived health, and a history of diabetes mellitus or pulmonary disease. When baseline and follow-up factors were entered together in the models, lower baseline balance, coordination and mobility were not found to be significant predictors of mortality and were replaced by follow-up factors, including recurrent falls; the need to be helped to walk outside the house and to perform instrumental activities of daily living; hospitalization; and the self-report of weight loss, cancer, cardiovascular disease, or stroke. Baseline indexes of functional status and/or low waist circumference were predictors of long-term mortality due to either cardio- or cerebrovascular disease or cancer. Conclusion: In addition to the self-report of chronic pulmonary diseases and diabetes mellitus, low objective and subjective functional and energy reserves are predictors of long-term mortality in older high-functioning women, predisposing them to a higher risk of functional impairment and to the occurrence of diseases. Key-words: longitudinal studies; logistic models; frailty; elderly

P31.15 DEATH IN ELDERLY, FRAIL STROKE PATIENTS UNDERGOING IMPLANTATION OF A GASTROTOMY TUBE. K.I. SØRENSEN, P. BRYNNINGSEN, E.M. DAMSGAARD *(Geriatric Department, Århus University Hospital, Denmark)*

Background: Within one week two patients died shortly after implantation of a gastrostomy tube.. In the same period a third patient with Parkinson disease died shortly after a gastrostomy tube implantation. A thorough audit did not uncover one single cause. Aim: To analyse factors which may lead to poor outcome in frail, elderly stroke patients needing a gastrostomy tube. Methods: We examined the records of all in-hospital stroke patients having a gastrostomy tube implanted from 2003-2007. We focused on infections, bleeding risk, anaemia, heart, kidney and lung function. Results: A gastrostomy tube was implanted in 25 patients because of severe dysphagia after stroke. One patient died within 24 hours and another within two weeks after surgery. Causes of death were sepsis and pneumonia, respectively. No further patients died within three months following surgery. Patients dying within two weeks: one patient was treated for sepsis two weeks before the procedure and because of pneumonia during the procedure. The other patient had been treated for urinary tract infection and was currently treated for pneumonia. Patients still alive three months after surgery: three patients were treated for urinary tract infection when operated upon, 13 had mild to moderate anemia, and 16 had chronic but well treated cardiac problems. Conclusions: Risks and benefits of gastrostomy tube implantation in elderly, frail stroke patients should be considered carefully, in particular in patients with severe infections.

P31.16 EXPECTATIONS ABOUT TRAINING PROGRAMS ON ALZHEIMERS' DISEASE IN PROFESSIONALS WORKING WITH ELDERLY IN SPAIN AND FRANCE: PRELIMINARY RESULTS OF THE HCNV PROJECT. S. MEHRABIAN[1], M.-L. SEUX[1], I. MIRALLES[2], M. COHEN[3], M.-C. ESCULIER[4], A.-S. RIGAUD[1] ON BEHALF OF THE HCNV GROUP *(1. Broca Hospital, Paris, France; 2. Foro Formacion, Galileo, Barcelona, Spain; 3. OSE, Paris, France; 4. ORT, Paris, France)*

The early and accurate diagnosis of Alzheimer's disease (AD) is essential for appropriate management of cognitively impaired elderly. The aim of the Health Care Net Varsity (HCNV) project financed by the European Commission is to aid early recognition of people developing AD or related disorders and assisting in their care. Because nurses, social workers and care assistants are usually the first care contact for demented patients it is important to improve their ability to recognize situations that may be linked to such diseases particularly when elderly do not spontaneously complain. To address this objective the HCNV project proposes a training program for carers, nurses or social workers working with elderly people. Before implementing this program expectation about contents and training methods relative to AD recognition was assessed. A specially questionnaire was distributed to a sample of nurses, social workers and carers working with elderly in Spain and France, 2 European countries enrolled in HCNV. Results: Respondents were 218 individuals (121 French and 97 Spanish), including nurses, social workers and care assistants. Demographic data were not different in the two groups : mean age 38.4 ± 10.9 and 37.3 ± 9.7 years; 88% and 89% were female, 60% and 55% of respondents have Bachelor of art or higher education level in the French and Spanish groups respectively. Only 38% in the French group and 47% in the Spanish group have followed previous course about AD. Among them 65% in the French group and 78% in the Spanish group expected further training to improve their knowledge or skills. Concerning the training method, 38% of the French and 41% of Spanish respondents preferred e-learning than face to face and paper-based training sessions. In Spain all those who preferred e-learning have bachelor of art of higher level of education : whereas in France 75.7% of them have bachelor of art or higher of educational level. Conclusions: The main part of professionals working with elderly people has limited specialised training in dementia. To enhance the knowledge of nurses and care assistants about AD, continuing education programmes are required. New technologies such as e-learning could bring a solution to this demand. Input of e-learning methods has to be evaluated in target groups based on educational level. In the HCNV framework a new training program for carers, nurses, social workers is designed to encourage the recognition of AD and related disorders in elderly people. This program using new technologies will be assessed in Spain, United Kingdom, Spain and France. Key words: Training, New technologies, dementia, carers, social workers

P31.17 IMPACT FOR THE EVALUATION OF PROFESSIONAL PRACTICES (EPP) CONCERNING THE ASSESSMENT OF THE NUTRITIONAL CONDITION OF PATIENTS ACCEPTED IN UNITS OF LONG PERIOD TREATMENTS AND SUFFERING FROM INTER CURRENT INFECTIONS. V. DUCASSE, C. LIDY, S. SAMANDEL *(Groupe Hospitalier Lariboisière-Fernand Widal, Paris)*

Introduction: The protein-energetic undernourishment (UPE) constitutes a major problem for the public health due to its frequency and to the factor of polymorbidity (infectious morbidity and mortality). As far as an institution is concerned, the UPE is

frequent and not well identified, yet. Its prevalence varies between 15 and 30%. Thus, there could be an improvement concerning the quality of the medical care administered in a unity of long period care. Objectives: Due to the haphazard and weekly structured health care given to the undernourished patients, the objective of our study concerned the organisation of the diagnosis and the follow-up of the undernourishment in the units of long period care of Fernand Widal hospital, in order to favour, at first, the exchanges of information among doctors, nursing personnel and dieticians and to familiarise the health care personnel with the risks related to the undernourishment. Methods: We have effectuated a clinical audition concerning thirty folders, chosen randomly and belonging to patients admitted in units of long period treatments, in which we have searched the trace of both the diagnosis and the follow-up of the nutritional state. Following the analysis of the results we have proposed plans of action aiming to the improvement of our practices: systematic filling-up of a dietetic card placed in the care folder, notifying the diet, as well as, the nutritional state and the interventions of the dietician; establish a quarterly multidisciplinary meeting aiming to fill-up the dietetic card. Finally, we have set a second audit in order to calculate the impact of these measures on the medical care given to the factor of undernourishment in our units of long period treatments. Results: The analysis of our first audit shows that the nutritional status has not been assigned in the care folder, the diet had been frequently established without a medical prescription and the nutritional state of the patient was very rarely evaluated during his stay in the hospital. The second audit effectuated eight months after the elaboration of plans of action, shows that the diet card was field up in twenty seven out of thirty (27/30) folders and its re actualization took place in each unit, ones per trimester. Discussion: - The diet card joins in a same support different items concerning the nutritional state of the patient and thus renders accessible the information to the entire health care personnel.- The quarterly multidisciplinary meetings ameliorated the exchanges among doctors-dieticians-health keepers who kept a diary of the health care given to the patient. These meetings contributed to a regular follow-up of the patient because of the re actualization of the different data.- The other evaluation criteria of the nutritional state which are recommended by the ANAES (National Agency of Accreditation and of Evaluation in Health) have not been evaluated in the present study. Our second objective will be to approach to the outmost the recommendations of the ANAES, and particularly concerning the weighing of the patient when entering the hospital and during his stay. Conclusion: The evaluation and the following up of the patients show a possible improvement in our units of long period care; however the efforts towards this scope have to continue especially as far as the weighing method and the follow-up of the curves of the weight are concerned.

P31.18 ROLE OF DOPAMINE TRANSPORTER IMAGING IN ELDERLY PATIENTS WITH PARKINSONS. C. GENY, F. COMTE, A. GABELLE, J. TOUCHON, C. JEANDEL *(Neurological and Gerontologic Department, Montpellier, France)*

Objective: to assess role of DAT scan in the management of older parkinsonian patients. Background:Diagnosis of the cause of Parkinsons can be difficult in the older patient. Extrapyramidal motor signs have long been recognized in normal aging and can been observed in degenerative disorders other than Parkinson disease. The effect of DOPA is difficult to assess in patients with many comorbidities. Methods: over a 48 months period, we retrospectively analysed the patients records, and change of diagnosis and therapy before and after[123]FP-CITscan. All patients were attending Neurological Department for mnesic and motor complaint. Specific uptake was calculated in the putamen using the occipital region as reference. Uptake values was considered to be anormal if putamen uptake was below<1,6. Results: 41 of 170 patients with DAT scan were selected in this study because they were older than 75 years . 38 of 41 patients had sufficient follow_up to confirm the diagnosis and been finally included in this retrospective study (mean age 79 years). After DAT scan,18 had change of diagnosis (final diagnosis: 7 PSP, 3 DCB, 3 mixed tremor, 3 AMS, 8 vascularParkinsons, 4 parkinson disease). 12/ 38 had normal striatal uptake. The lowest value of striatal uptake was observed in PSP patients. The highest R-L difference was observed in vascularParkinsons. Conclusion: our results suggest that DAT scan can help in the management of elderly patients withParkinsons, in clarifying diagnosis and modifying DOPA therapy.

P31.19 ORTHOSTATIC HYPOTENSION IN ELDERLY PATIENTS IN AN EMERGENCY DEPARTMENT. N. MOREL[1], M. VERNY[1], B. RIOU[1], J. BODDAERT[1,2] *(1. Emergency Department, Pitie-Salpêtrière Hospital, Paris, France; 2. Geriatric Center, Pitie-Salpêtrière Hospital, AP-HP. UPMC Paris, France)*

Orthostatic hypotension (OH) is a frequent condition in elderly patients, associated with falls, but data about feasibility of OH test and management in emergency elderly patients are scarce. If the diagnosis of OH in ED requires specific investigations, and often treatment modifications, elastic stocks compression (ESC) could be of interest but its feasibility has not been evaluated in an emergency department. Material and methods: We performed a prospective study in a tertiary care emergency department (75000 visits per year). During 14 days, all patients older than 75 were considered for OH test, diagnosis and treatment. Orthostatic hypotension was present if systolic blood pressure fall ≥ 20 mmHg and diastolic blood pressure ≥ 10 mmHg. In presence of OH, ESC were used and OH measurement was controlled after 30 minutes in resting conditions. Results: During the study period, 206 patients were evaluated (mean age 84 ± 6 years, sex.ratio (w:m) 3,3 :1, ADL 4,4 ± 2). OH test was performed in 118/206 patients (feasibility 57 %), but not in patients with fractures, stroke or pulmonary embolism suspicions, or haemodynamic failure. When test was performed, OH was noted in 37/118 (31%). Patients with OH were more likely to have more diseases (3,9 ± 2,1 vs 3 ± 1,8, p=0.0054), more treatments (5.9 ± 3.9 vs 4.6 ± 3.6, p=0.0331), and lower ADL score (4.9 ± 1.3 vs 5.5 ± 0.9, 0.0112). ESC were used in 25/37 (feasibility 68%). After 30 min. rest with ESC, OH was found in 9/24 (38 %). Conclusion: Orthostatic hypotension is frequent in emergency elderly patients, and could be potentially threatening for patients. OH test is feasible in ED, but further studies are needed to confirm its prognostic value and the usefulness of ESC.

P31.20 MEMORY PROFILE IN 28 ELDERLY PATIENTS WITH LEWY BODY DEMENTIA. C. MARQUIS[1], S. GREFFARD[2], B. DIEUDONNE[2], Z. BARROU[2], J. BODDAERT[2], M. VERNY[2] *(1. Unité Mobile de gériatrie, Hôpital Foch, Suresnes, France; 2. Centre de Gériatrie, Hôpital de la Pitié-Salpétrière, Paris, France)*

Purpose: Clinical consensus criteria for dementia with Lewy Body (DLB), described by Mc Keith, are specific but lack sensibility. Our aim was to determine the amnesic profile in DLB. Given the heterogeneity of the clinical presentation and neuropathological lesions, our hypothesis was that the verbal episodic memory impairment could also be heterogeneous in DLB patients and could be related also to hippocampal type. Method: We retrospectively studied the neuropsychological profile of 28 ambulatory patients clinically diagnosed as DLB. We looked for three profiles of memory impairment that we defined on the basis of the results described in Alzheimer disease (AD) and Parkinson disease (PD) patients. Results: In all patients, global cognitive mental status was altered. They all had a verbal memory impairment, altered executive functions and most of them were deteriorated in the visuo-spatial area. Attention difficulties were very often observed during the medical follow-up, but not confirmed by the tests used. The analysis of the individual memory results allowed the identification of the three memory profiles, hippocampal in (1)4 patients (50 %), intermediate in 3 ((1)(1) %) and sub cortical in (1)(1) (39 %). The hippocampal profile was mostly observed in patients with the lowest global cognitive mental status. Conclusions: Our study shows that hippocampal profile, usually described as typical of AD, is also compatible with a DLB diagnosis. Because the verbal episodic memory impairment appears to be highly variable in geriatric DLB patients, analysis of the neuropsychological evaluation has to be cautious.

P31.21 CIRCULATING MICROPARTICLES IN EMERGENCY ELDERLY PATIENTS. D. BONNET[1], A. FOREST[1], M. VERNY[1], C. BOULANGER[2], B. RIOU[3], Z. MALLA[2], J. BODDAERT[1,2,3] *(1. Geriatric Center, Centre Hospitalo-Universitaire Pitié-Salpêtrière, (Assistance-Publique Hôpitaux de Paris (AP-HP), Université Pierre et Marie Curie, Paris, France; 2. Department of Emergency Medicine and Surgery, Centre Hospitalo-Universitaire Pitié-Salpêtrière, (Assistance-Publique Hôpitaux de Paris (AP-HP), Université Pierre et Marie Curie, Paris, France; 3. INSERM U-689, Hôpital Lariboisière, Paris, France)*

Objectives: Microparticles (MPs) are shed membrane vesicles released from activation or apoptosis of several cell types, in response to numerous stimuli. The purpose of our study was to analyze circulating MPs in elderly compared to young patients, in non infectious and infectious conditions, in order to analyze age and infection effects on MPs production. Design: Pilot study: Settings: Emergency Department: Participants: Patients were divided into four groups according to their age (<50 or ≥ 75 years-old) and the presence of systemic infection (yes or no). The final diagnosis of infection was reached when it was classified as certain or possible by an expert committee. Measurements: Circulating MPs were isolated from 5 ml venous citrated blood, and cytofluorometry using specific antibodies was performed to determine levels of total, endothelial (EMPs), red blood cells (RBC-MPs) or platelet (PMPs) MPs. Results: One hundred and one patients were recruited. Infections were mainly represented by pneumonia in elderly (79%) and urinary infections (43%) in young patients (p<.05). We found no significant difference associated with age in patients without infection. However, infection significantly altered MPs levels. Patients with infection had a lower level of EMPs in young (173 [101-240] vs 374 [262-423], p<.05) and in elderly patients (177 [89-288] vs 252 [195-512], p<.05). In infected patients, PMP level was significantly lower in young patients compared to elderly patients (95 [63-132] vs 174 [124-227], p<.05). Comparison between dead and alive elderly patients showed higher EMP levels in dead patients (346 [89-551] vs 156 [76-198], p<.05). Conclusions: Our results suggest differences in the production and/or removal of EMPs in relation to infection status, and raises the question of its potential role as prognostic marker in elderly patients with infection.