EASD**EUROPEAN ASSOCIATION FOR THE STUDY OF DIABETES**

ASSOCIATION EUROPEENNE POUR L'ETUDE DU DIABETE · EUROPÄISCHE GESELLSCHAFT FÜR DIABETOLOGIE

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E-mail: secretariat@easd.org · Homepage: <http://www.easd.org>**EASD****News Section
4/2005**

A week in Vienna: Report from the 2004 EASD Scientists Training Course

The 11th EASD Scientists Training Course took place in Vienna, Austria. This Course was hosted by the Division of Endocrinology & Metabolism and Department of Internal Medicine 3, Medical University, Vienna, Austria and organized by Associate Professor Michael Roden and his team. Our group consisted of 13 participants from 12 different countries with diverse research interests in the field of diabetes; we ranged from PhD students through post docs to practicing diabetologists with research interests.

Our hotel was located only a 15-minute walk from the Medical Faculty and gave us a bit a fresh air before an intense day. The daily programme ran from 8:00 until 17:30, lunch was prepared for us in the hospital canteen. The atmosphere at the course was friendly but also scientifically demanding. Following our introductions on Monday morning, we were quickly divided into groups of four and given our timetables for the week. The course was very well organized and covered a lot of the theory concerning modern techniques and methods currently applied in clinical diabetes and metabolic research. We also participated every day in hands-on practical sessions in the laboratories. During the lectures there were lively discussions between trainers and trainees – we exchanged views and experiences. We learned about techniques during the practical sessions; we saw and/or performed oral glucose tolerance tests, frequently sampled intravenous glucose tolerance tests and euglycemic hyperinsulinemic clamps, isotopic glucose tracer dilution and gas chromatography mass spectrometry analysis, deuterated water method and metabolic flux analysis, in vivo multinuclear $^{13}\text{C}/^{31}\text{P}/^1\text{H}$ NMR spectroscopy, microdialysis and microperfusion and measured intima-media thickness on each other. We also had a chance to perform a biopsy of skeletal muscle on cadavers. Every participant had an opportunity to present his/her particular research.

The course was not all work and a series of social events was also fitted into the packed programme. On

the first night we had a welcome dinner at a traditional Austrian “Heurigen” in Grinzing and tried some interesting local food. We also had a guided tour through the Vienna Museum of Fine Arts. At the end of the course we were invited to a farewell dinner in one of Vienna’s fine restaurants.

We would like to thank all those who were involved in the Course, not only the organizers who made it a unique experience for all of us but also the volunteers who participated in the practical sessions. Special thanks go to Associate Professor Roden, Drs. Brehm, Schmid, Winzer and Stingl for their intense efforts to make this course fruitful and enjoyable and to EASD for the generous funding for this wonderful Course.

On behalf of the participants of the 11th EASD Scientists Training Course,

Barbora de Courten, MD PhD

EASD Robert Turner Clinical Research Course

The first EASD Robert Turner Research Course was held at The Oxford Centre for Diabetes, Endocrinology and Metabolism (OCDEM) 13–17 April 2004. The EASD, in collaboration with the Oxford Centre for Diabetes, Endocrinology and Metabolism, established this course on clinical research in diabetes for physicians under the age of 40, and it is intended to allow participants to become familiar with major theoretical and practical aspects of clinical research.

The Course was organised by Prof. David R. Matthews, and the faculty included Prof Robert Heine (Chairman), Dr Fredrik Karpe, Prof Keith Frayn, Prof Rury Holman, Dr Jonathan Levy, Dr Anne Clark, Prof Geoff Gibbons, and Dr Brian Shine. The topics covered included

- Design of experiments
- Ethical review
- Grant applications
- Physiological studies
- Trials and trial theory
- Statistics and statistical review
- Good Clinical Practice – Handling samples
- Handling data
- Science writing methodology
- Publication

The attendees came from the following countries:

Czech Republic, Germany (3), India, Ireland, Italy, Lithuania, Nigeria (2), New Zealand, Poland, Russia, Spain (2), Sweden, The Netherlands, Ukraine, United Kingdom (2), Yugoslavia.

The attendees were very enthusiastic and the course was widely regarded as a success. We are grateful for the unrestricted educational grant from Johnson & Johnson. We used college accommodation, which was satisfactory, though not luxurious! We were ably supported by Mrs Carol Hill from OCDEM, who undertook much of the infrastructure support.

We hope to repeat the course annually. The course for 2005 is already fully booked.

Prof David R. Matthews
Oxford Centre for Diabetes,
Endocrinology and Metabolism
Churchill Hospital
Oxford, OX3 7LJ
UK

The attendees in the foyer of OCDEM.

Part of the course involved designing and undertaking an experimental protocol. Here one of the participants in the OCDEM clinical research unit, eats a cheese breakfast – designed by their group as a physiological stimulus.

This part of the course involved many aspects of sample handling and analysis. The data were processed the day of the designed experiment and the data prepared for presentation to a critical audience of the rest of the group.

Report of the 23rd Workshop of the AIDPIT Study Group (Artificial Insulin Delivery Systems, Pancreas and Islet Transplantation)

President:	A Tibell, Stockholm
Vice President:	M Pinget, Strasbourg
Organising Secretary:	T Lundgren, Stockholm
Honorary Secretary:	RM Smith, Bristol
Honorary Treasurer:	M Brendel, Giessen
Committee Members:	F Bertuzzi, Milan R Calafiori, Perugia A. Konigsrainer, Innsbruck V Lassmann-Vague, Marseille A. Liebl, Bad-Heilbronn J Oberholzer, Chicago E Renard, Montpellier

The 23rd Workshop of the Artificial Insulin Delivery Systems, Pancreas and Islet Transplantation (AIDPIT) Study Group of the EASD, held at the Kongresshaus, Igls, Austria from 25 to 27 January 2004, was attended by 217 participants. After the traditional welcome from the President, Ezio Bonifacio (Milan) opened the Workshop by giving an invited lecture discussing the predictive power of autoantibodies specific for insulin, GAD and IA-2/IA-2b in Type 1 diabetes. Analysis of sera from 1353 offspring of parents with Type 1 diabetes enrolled in the BABYDIAB study has shown that 11% of offspring developed autoantibodies by 2 years of age with anti-insulin antibodies appearing significantly earlier than anti-IA-2 or anti-GAD antibodies. Appearance of multiple antibodies had a much higher predictive value: Individuals developing anti-IA-2 antibodies and at least one other had only 20% disease free survival with antibodies against the cytosolic portion of IA-2 (IA-2b) being more specific than anti-IA-2 antibodies. Detailed analysis of antibody specificity, affinity and isotype allowed stratification into groups with risk ranging from 7 to 89% by 5 years of age. He also reported that 10% of islet transplant recipients develop anti-GAD antibodies. None developed anti-insulin or anti-IA-2 antibodies. Gerard Reach (Paris) discussed the problems associated with the inevitable lag time to insulin release in artificial insulin delivery systems which occurs predominantly because glucose is monitored in a non-physiological site: the skin. The algorithms used to drive insulin delivery and time for insulin absorption increase the lag further. Resolution of this problem requires either placement of the sensor in blood or vascularisation of the sensor, use of a predictive algorithm and intrave-

nous insulin delivery. Jose Oberholzer (Chicago) concluded this session by reviewing progress with clinical islet transplantation. Edmonton are reporting 80% 1 year and 50% 3 year insulin independence, with 88% 3 year graft survival. HbA1c at 3 years for all patients with functioning grafts, even if back on insulin, is not significantly different to whole pancreas transplant recipients. Side effects are significantly less than seen with whole pancreas transplantation. Considering logistics, a clean room for isolation of islets to GMP standard, endocrinology support, a dedicated surgical team, an islet isolation team comprising at least 4 fully trained members of staff and expertise with use of immunosuppressive drugs in transplantation are the minimum requirements. The GRAGIL network has estimated the cost of management of an islet transplant recipient for 1 year from transplantation, including isolation costs, to be €77745. A donor pool of 100 donors per annum is ideal. This takes into account 28% of pancreases being used for whole pancreas transplantation. He recommended minimising modifications to the Edmonton protocol initially, noted room for improvement in immunosuppressive protocols and extolled the virtues of being creative within the above constraints. Finally, the success of the GRAGIL, Nordic, Geneva-Budapest and Miami-Houston networks argues strongly for this model. Antonio Secchi then chaired the Ernst Pfeiffer memorial lecture given by Roel Hoogma (Amsterdam). Metanalysis of trials comparing multiple daily insulin injections (MDI) and continuous subcutaneous insulin infusion (CSII) confirms that CSII gives better glycaemic control. However, data are lacking to define criteria for selection of ideal recipients and assessment of quality of life outcomes and

complications. The Five Nations study has demonstrated quality of life, physical health and mental health improvements with CSII. He concluded by proposing that what is needed is trials of CSII versus glargine based therapy and cost benefit calculations.

Julie Kerr-Conte (Lille) opened the Monday session reviewing strategies for generation of an expandable source of islets. In nesideoblastosis many insulin and CK19 double positive cells are seen, suggesting a ductal origin for insulin producing cells. Similarly, PDX1 is seen in both proliferating ducts and adult beta cells. Susan Bonner-Weir has provided proof of principle for generation of functional endocrine tissue from ductal tissue. Furthermore, ductal cells from human tissue from donors <10 years of age can differentiate to endocrine cells in vivo in nude mice. She then placed the putative role of nestin expression in context, demonstrating that it is not co-expressed with *ngn3*, that it has no role in embryogenesis and that it is a marker for endothelial cell precursors. Turning to somatic stem cells, many questions remain with no ideal solutions yet apparent.

G. Basta (Perugia) then continued the theme of transdifferentiation of ductal cells describing work in a neonatal pig model. He described growth factor requirements for generation of PDX 1, insulin and Glut 2 positive cells. However, despite expression of these essential beta cell molecules the cells did not release insulin in response to glucose. G. Luca (Perugia) then discussed further the pros and cons of using neonatal islets, the main problem being the delay to achieve function. Co-encapsulation of Sertoli cells with neonatal porcine islets increases islet insulin, glucokinase, Glut 2 and *Nkx 6.1* expression, ip injection of these islet/Sertoli cell clusters achieving normoglycaemia up to 52 days in NOD mice. He then went on to demonstrate that in a Boyden chamber, islet driven chemotaxis is blocked by anti-MCP-1. C. Toso (Geneva) demonstrated prolongation of both concordant and discordant xenograft survival using a combination of CTLA4-Ig and rapamycin (0.2mg/kg ip on alternate days for two weeks). O. Vosters (Brussels) concluded this session by asking if ductal cells are immunogenic. He demonstrated expression of class I MHC, CD40 and CK19 but not MHC class II, CD80 or CD86. Ligation of ductal cell CD40 drove NF κ B dependent inflammatory cytokine production including TNF- α .

G. Bolli (Perugia) gave an invited lecture providing an update on the use of insulin analogues. He began by emphasising that the goal was to restore physiological insulin delivery profiles, reviewing the shortcomings of traditional therapy. Rapid acting analogues give much better peri-prandial control, but do not improve overall glycaemic control because of late glucose "escape". In combination with traditional NPH insulin this escape is prevented. They are also particularly useful in type 2 DM where there is residual

endogenous insulin secretion. Clinical studies using three pre-meal injections of Lyspro/NPH mixes and a fourth bedtime injection of NPH insulin, show a slight improvement in HbA1c and a marked reduction in hypoglycaemia. However, commercially available preparations do not allow sufficient flexibility of Lyspro to NPH ratios. Use of either CSII or long acting insulin analogues (glargine or acylated insulin) instead of NPH are both effective at reducing nocturnal hypoglycaemia although overall glycaemic control improves little. A. Liebl (Bad Heilbrunn) gave the second invited lecture of this session presenting data on progress with continuous intraperitoneal insulin infusion (CIPII). He considered five reasons for using CIPII: subcutaneous insulin resistance (very rare), absorption defects, brittle diabetes with organic reasons, lipoatrophy/hypertrophy and allergies against catheter or needle material. He reported on the Dia-Port study which is comparing CIPII and CSII in 60 patients. Overall the improvements in metabolic control and quality of life were equivalent with ip and sc insulin infusion although fewer hypoglycaemic episodes were seen with ip. Intraperitoneal infusion was associated with significantly more local device related complications including occlusion. Insulin antibodies were also detected in 3 patients receiving ip therapy. V. Melki (Toulouse) reminded us, on behalf of the EVADIAC group, that insulin quality greatly affects pump performance. N. Laguerre-Lang (Nancy), also on behalf of EVADIAC, reassured us that no correlation was seen between appearance of anti-insulin antibodies and the risk of catheter encapsulation. K. Wiefels (Düsseldorf) presented a case history of a patient with subcutaneous insulin resistance successfully treated with intravenous insulin using the Dia-Port™ system. V. Canonico (Perugia) concluded this session by presenting data on mathematical modelling of glycaemic control using closed loop systems. The algorithms tested gave better control than bolus insulin after a 45g or 90g carbohydrate meal, but when this was increased to 135g late hypoglycaemia was seen. Best results were seen when the feedback control was used alongside a 4u insulin bolus given at meal times.

W. Steurer (Innsbruck) opened the pancreas transplantation session by asking why more patients are not being referred for whole pancreas transplantation. Often pancreas transplantation is simply not considered and the high early costs may be considered prohibitive if the long-term financial benefits are not appreciated. Physicians are further deterred from referring patients by the perceived high morbidity and mortality. Education is the principle answer. In the "modern" era of enteric drainage patient survival following whole pancreas transplantation is approximately equal to survival with the underlying disease (84–90% 4 year survival with transplant against 92.1% for waiting listed patients). The life style bene-

fits and improved renal allograft survival (renal survival for simultaneous pancreas kidney transplants is approximately 16 years versus 10 years for kidney alone) following whole pancreas transplantation thus argue for transplantation in appropriate patients. The argument for isolated pancreas transplantation (PTA) in patients with normal renal function is less clear, particularly as the Israel Penn registry records an incidence of post transplant lymphoproliferative disorder of 46%, probably driven by high de novo cytomegalovirus (CMV) infection rates. Steurer suggested that part of the solution is to recognise that acute rejection is not the major issue in whole pancreas transplantation, allowing appropriate reductions in immunosuppression and hopefully development of calcineurin inhibitor free regimens. P. Fiorina (Milan) presented data comparing the effect of L-arginine on renal blood flow (assessed by magnetic resonance flow imaging) and high energy phosphate levels (assessed by ^{31}P -MR spectroscopy). Kidney pancreas recipients and non-diabetic kidney transplant recipients had a significantly better response to L-arginine and a reduced inorganic phosphate ratio compared to diabetic kidney transplant recipients. A. Coppelli (Pisa) reported improvements in both proteinuria and blood pressure in 19 pancreas transplant alone recipients with Type 1 DM 6 months after transplantation. R. Koznarova (Prague) reported interim results of an ongoing study comparing eye disease in 177 diabetic recipients of either simultaneous pancreas kidney or kidney alone transplants. Simultaneous kidney pancreas, but not kidney alone transplantation, stabilised or improved retinopathy at 7 years. Visual acuity was improved also in the SPK as compared to the kidney alone group. No effect was observed on cataract incidence. W. Steurer (Innsbruck) reported on data on steroid withdrawal in simultaneous pancreas kidney transplant recipients enrolled in the EUROSPK study. 54 patients receiving tacrolimus and 36 receiving ciclosporin successfully withdrew steroids. Significantly fewer graft losses were seen in the group in whom steroids were successfully withdrawn. However, at 2 years the mean daily MMF dose was significantly higher in patients in whom steroids were withdrawn (1.7g) than in those remaining on steroids (1.2g) potentially confounding interpretation of these results. F. Saudek (Brussels) presented data from the same study demonstrating significantly better rejection free graft survival and overall graft survival in the tacrolimus group despite a significantly lower mean daily dose of MMF. No differences were seen in kidney survival, vascular events, hypertension or clinically significant infection rates.

Prof H. Kojima (Japan) opened the second experimental islet transplantation session by reviewing his work generating insulin producing cells from gut or liver precursors. PDX1 expression in the gut derived IEC6 cell line results in expression of a range of endo-

crine markers but not glucagon or insulin. Stimulation with betacellulin results in insulin and ISL1 expression and these cells improve blood glucose in STZ diabetic rats. Similar results were described transducing the same genes into liver buds. Finally, use of adenovirus to express either PDX1 or neuroD is able to drive hepatic insulin production capable of normalising blood glucose. S. Cabric (Uppsala) presented data demonstrating expression of hirudin using an adenoviral construct, suggesting a mechanism by which the immediate blood mediated inflammatory response (IBMIR) may be prevented. S. Del Guerra (Pisa) told us that PXCbeta 2 activation in many tissues correlates with development of diabetic complications. D. Brandhorst (Giessen) reviewed experience with Servier NB-8 collagenase in combination with neutral protease. He compared isolations using unstored, two-layer method (TLM) pre-loaded, 6.5h cold storage and pre-loaded and TLM post-loaded pancreases. Yield, glucose stimulated insulin release and ATP content were better for unstored pancreases than all other groups. Viability and insulin content were the same in all groups. J. Kriz (Prague) described detection of rat islets in vivo using MRI following in vitro labelling with iron nanoparticles. U. Johansson (Uppsala) gave the penultimate presentation of this session demonstrating that coating of human islets with human aortic endothelial cells protects islets from the IBMIR. R. Lupi (Pisa) concluded the session by presenting data demonstrating that metformin protects islets from glucotoxicity.

Dr Bo Nilsson opened the clinical islet transplantation session by giving an invited lecture summarising the importance of the IBMIR and reviewing strategies to prevent it. He emphasised that cellular transplants differ from solid organ grafts because the major interface is between tissue and blood rather than endothelial cells and blood. This results in innate responses being strongly activated. A rise in thrombin activation time (TAT) is seen at 60 minutes post transplantation and in C reactive protein (CRP) at 24-48h, with an inverse correlation between TAT and CRP levels. Tissue Factor (TF) is produced by endocrine tissue and is a major initiating factor. A number of options exist to limit TF mediated initiation of IBMIR: Heparin, melagatran, dextran sulphate, coating islets with eg endothelial cells and gene therapy approaches. Inhibitory FVIIa is a naturally occurring inhibitor of TF. In a marginal islet mass cynomolgus monkey model administration of iFVIIa improves graft function. In the first oral presentation of the session S. Marzorati (Milan) continued this theme presenting data on 11 patients transplanted using the Edmonton protocol. In vitro TF and MCP-1 production before transplantation did not correlate with graft function. A. Kelkar (Leicester) described infusion of islets via a catheter inserted into the left portal vein via the umbilical vein. In 4 patients receiving autotransplants this allowed

R 42

sequential measurement of portal pressure up to 7 days post transplantation. F. de Taddeo reported outcomes in 14 patients transplanted in Milan using the Edmonton protocol. 10 patients have completed the transplant protocol. All had C-peptide levels $>0.5\text{ng/dl}$ at more than 1 month after transplant with 70% early insulin independence. Two of these seven patients have achieved long term insulin independence with 5 returning to insulin injections. All patients have had a complete resolution of hypoglycaemia. One hepatic bleed and 1 partial portal thrombosis have been seen. Two patients have experienced worsening renal function. On behalf of the Nordic Network, T. Lundgren (Huddinge) then presented data on transplantation of 16 patients with functioning kidney transplants. All were converted to tacrolimus and sirolimus when placed on the waiting list. Daclizumab was given at the time of transplant. All isolations are performed in Uppsala with islets cultured for 24–96 hours. Priority is given to patients who have already received islets and to the donor centre. Of 7 patients who have completed the transplant protocol 3 remain insulin independent 2–26 months after transplantation. One patient died of a cerebral haemorrhage six months post transplantation. R. Lehman presented the Zurich experience with simultaneous islet kidney transplantation using a modified Edmonton protocol, pump therapy being continued for 2 months after transplantation. All patients receiving two or more islet preparations are insulin independent (272–946 days) and the mean HbA1c for all 8 patients is 6%. M. Pinget (Strasbourg) gave an invited presentation discussing selection of the optimal therapy in Type 1 diabetes. Before 2000 the options available were sc insulin by MDI or CSII, oral agents, ip insulin or pancreas transplantation. Monitoring was by capillary blood glucose testing. Even using individualised regimens the outcomes were poor, largely due to the unpredictable effects of insulin. Initially the simplest treatment would be chosen, considering others if inadequate glycaemic control was achieved. In Strasbourg only combined kidney pancreas transplantation was offered. Since then a number of developments have occurred. First, three major prevention trials have failed to show benefit using oral insulin, subcutaneous insulin and nicotinamide. Ongoing follow up of the DCCT patients has demonstrated that although HbA1c values come together for intensive versus conventional treatment groups post study, the lower rate of complications in the intensive treatment group is sustained. In addition short acting and long acting insulin analogues have become available and pump therapy has improved and is more widely available. Glucose sensors are more widely used and finally, islet transplantation is now an established procedure. He suggested that CSII using fast acting insulin analogues is the gold standard for therapy. He proposed a stepwise approach starting with a basal bolus insulin injection regimen. Success

should be judged by HbA1c, frequency of hypoglycaemia and quality of life measurements. If this initial approach fails, continuous glucose monitoring should be used to provide an optimal data base for further decision making. CSII should be considered next followed by ip insulin infusion, islet transplantation and if all else fails whole pancreas transplantation. T. Koschinsky (Düsseldorf) then gave a detailed overview of the complexities of subcutaneous glucose monitoring. He reviewed the many determinants of skin interstitial glucose highlighting skin vascularity as being critically important. A lag of approximately 30 minutes or more is seen at the forearm compared to the finger, these differences being less marked in deeper skin layers. Considering only these parameters glabrous skin would be ideal. However, it has more nerve endings limiting catheter placement. U. Beyer (Stockholm) presented data on the performance of a non-enzymatic glucose sensor (viscometric affinity sensor) in twelve non-diabetic individuals. Values agreed best with capillary glucose measurements, uniform setting of the sensor slope, with a single point calibration to set the offset for each monitor, giving the best results. G. Freckmann (Ulm) described development of an educational tool for training in interpretation of continuous glucose monitoring results. Eleven different traces were evaluated by 12 patients. Feedback from this analysis will allow refinement of this tool. T. Vriesendorp (Amsterdam) described use of the CGMS (Medtronic MiniMed) and GlucoDay continuous blood glucose monitoring systems for monitoring of blood glucose in patients undergoing abdominal surgery. Technical failure was a significant problem with both sensors. However, data suggests that this technique may be a useful addition to peri and post-operative monitoring of patients. A. Maran (Amsterdam) described the use of the GlucoDay continuous glucose monitoring system to detect nocturnal hypoglycaemia in five patients subsequently confirmed to have insulinomas. P. Modi (Toronto) concluded the session by presenting data comparing the pharmacokinetics of Oralin and sc insulin. 17 patients with type one diabetes received either three separate doses of oralin or sc insulin, each followed 15 minutes later by a 360 calorie Ensure meal. Oralin achieved peak serum insulin levels at 20 minutes as opposed to 60 minutes for sc insulin with no significant differences between the three Oralin administrations.

The Tuesday afternoon session started with three discussion groups, which were followed by the Presidential Lecture given by B. Keymeulen (Brussels). He highlighted pancreas quality, details of the isolation procedure and recipient factors eg BMI, as significant determinants of beta cell graft outcome and identified improved reproducibility of islet isolations, improved immunosuppression and a better understanding of the reasons for differences in long term function as important goals. Historically of 8 IAK transplants,

4 that received ATG achieved good graft function and 4 that did not receive ATG failed. Furthermore, 5 grafts immunosuppressed with MMF, CsA and corticosteroids all achieved good initial graft function but failed by 1 year. Thus, now all patients transplanted in Brussels receive dispersed islet grafts cultured in serum-free medium, ATG, MMF and Tacrolimus. Preparations are only transplanted if they contain >30% insulin-positive cells and <10% damaged cells. Transplanted beta cell mass is an important determinant of outcome, 8 patients receiving $>2 \times 10^6$ beta cells/kg had functional grafts at 1 year with 6 achieving insulin independence.

The final session of the Workshop opened with F. Bertuzzi (Milan) discussing parameters determining isolation outcome in 437 isolations performed in Milan. Only donor BMI was significant on multivariate analysis. Taken together age of donor, organ condition and weight of pancreas were also found to be important determinants. He suggested that pancreata should not be used from donors with a BMI <22.4 or <30yrs of age. He then presented data comparing NB1 and Liberase on behalf of the Geneva group. Using a single vial of NB1 supplemented with 20units of neutral protease, islet yields were better with NB1 as was yield/g of pancreatic tissue, larger islets being isolated with NB1 with less fragmentation. No difference was seen in functional assays but fewer apoptotic islets were found with NB1 digests. A further advan-

tage of NB1 is the lack of lot to lot variability. M. Kumagai-Braesch (Huddinge) presented data on antibody responses in 10 patients transplanted with porcine islets. Early antibody responses were directed predominantly against Gala 1,3 Gal epitopes. Later reactivity shifted to non-Gal epitopes. This did not represent recurrent autoimmunity as these antibodies did not recognise IA-2 or GAD. Use of the two-layer method for pancreas preservation results in improved islet yield and viability but is logistically difficult for many centres to implement. H. Shen (Giessen) described a modification of this technique, the one-layer method (OLM), which omits UW solution from the preservation set up. No significant differences were seen in islet yield or function comparing porcine islets isolated from pancreata preserved using the OLM versus the TLM. The simplicity of the OLM may therefore make it preferable to the TLM. T. Hubert (Lille) examined the hypothesis that a major determinant of islet transplant outcome is the islet mass of the donor. In 5 patients acute insulin release in response to glucose of the donor was highly correlated with graft function. M. Goto (Uppsala) gave the last presentation of the meeting demonstrating that low molecular weight dextran sulphate inhibited the IBMIR in vitro and was not deleterious to islet function. It would be suitable for clinical use offering a possible therapeutic intervention to prevent early islet loss due to this response.

R 44

Foundation of EASD Study Group on Primary Care Research in Diabetology

Request for enrolment

In most countries, the majority of type 2 diabetes patients is treated by primary care physicians. It is one of the major challenges in diabetes care to provide high quality diabetes care to all these people. The treating physician is confronted with many challenges including problems of co-morbidity, the patient's adherence to a complex treatment regime, the balance between delegation of tasks and his/her own responsibility and the challenges of reducing long-term complications. Evidence-based diabetic medicine is still far from established. Shared care with cooperation between primary and secondary care differs widely among European countries. Many research questions relevant to people with diabetes and those delivering care to people with diabetes still need to be answered.

Aim

The aim of the EASD Study Group on Primary Care Research in Diabetology is to increase the amount and the quality of research in primary diabetes care and to facilitate international contacts and motivate young scientists to perform research in primary as well as shared care settings.

Position

The EASD Study Group on Primary Care Research in Diabetology intends to be the formal European Study Group for diabetes research in primary care. Members of the study group also form the 'research branch' of Primary Care Diabetes Europe. (www.pcdeurope.org)

Following the first meeting in Athens 2005 the EASD Executive Committee, Council and General Assembly will be asked to accept the creation of the new EASD Study Group. Up to now 18 general practitioners from 11 European countries have become members of the group. The Steering Committee for the moment consists of Prof. Guy Rutten, President; Prof. Torsten Lauritzen, Vice President; Dr Kamlesh

Khunti, Honorary Secretary, and Dr Johan Wens, member.

Activities

The Study Group will bring together researchers working in the field of diabetes in primary care and facilitate exchanges of experiences in research and clinical practice during annual meetings at the EASD Annual Meeting

The Study Group will apply for funds for collaborative European studies

In addition to the annual meeting of the EASD and PCD the Study Group will organise seminars, workshops and other meetings regarding diabetes research in conjunction with other EASD working groups when appropriate.

The Group will first meet on Sunday 11 September 2005 in Athens.

Membership

Membership of the Study Group is open to all those primary care physicians who are members of both EASD and Primary Care Diabetes and are actively involved in primary care diabetes research.

Members must attend one meeting every two years to be an active member and supportive membership may also be offered.

Information

If you would like to receive additional information or to become a member of this EASD Study Group, please contact:

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Announcements

The 37th Annual Meeting of the Diabetic Pregnancy Study Group (DPSG)

Mykonos, Greece, 15–18 September 2005

Deadline for Abstracts Submission 16 April 2005 (strictly enforced).

For further information please contact:

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2000 Years of Diabetes Mellitus – Symposium on the occasion of the 41st Annual Meeting

Delphi, Greece, 7–9 September 2005

Early registration deadline: **30 June 2005**

Abstract submission deadline: **31 March 2005**

For further information, please visit the following site:

www.cnc.gr

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