Uro 25

SALVAGE CHEMOTHERAPY IN DISSEMINATED TESTICULAR CANCER: EFECTIVITY DEPENDENT ON RESPONSE TO AND TYPE OF PRIOR TREATMENT

H.-J. Schmoll, Th. Knoblauch

We analyzed the results of the salvage chemotherapy trials in pts. with refractory metastatic testicular cancer in Hannover from 1978 to 1985; the salvage treatments have mostly been part of prospective trials with standardized pretreatment. A total of 42 pts. have been treated with 66 salvage treatments. Only 5 pts. had a substantial long term benefit from this salvage treatment: 4 CR and 1 NED. 3/5 pts. still are living without tumor after 15, 24 and 36 mths.; 1 pt. is living in PR after 30 mths. and 1 pt. died after 10 mths. by progressive disease. 3 CR-pts. were tumor free (1 CR, 2 NED) before reinduction for 15 - 53 mths.; 2 pts. had a PR with the primary treatment. The pretreatment was PVB in 4 pts. and VBL/BLM/IPP in 1 pt. The best chance for a salvage have pts. with either CR, NED or prolonged PR by primary treatment (3/14). In pts. with a short interval from PR to progression the chance for salvage is poorer (2/18), whereas in pts. with progression under induction treatment no chance exists with any salvage chemotherapy. Another important predictive factor is the type and aggressiveness of the primary chemotherapy: 1/3 pts. treated with a Ifosfamide - but not Cisplatinum - containing regimen (IVB) had a CR with a Cisplatinum/VP16 containing reinduction, and 4/15 pts. (26%) could be salvaged with Platinum/VP16 after pretreatment with PVB. In contrast, pts. who have been pretreated with more aggressive and active regimens the chance for an effective salvage treatment was minimal: only 1/8 pts. after prior treatment with PVBI and 0/8 pts. after prior treatment with Cisplatinum ultra highdose/-VP16/Bleomycinare diseasefree. Conclusions: 18% of the pts. achieved a disease free status with salvage chemotherapy (15%) +/- surgery (3%). Pts. with relapse after primary CR or a longer lasting stable PR and particularly pts. pretreated with standard chemotherapy with medium activity have a chance for salvage. Pts. progressing on Cisplatinum containing induction chemotherapy have no chance of cure with any type of salvage regimen incl. Cisplatinum/VP16/ +/- Ifosfamide containing regimen. Further reports regarding the possibility of salvage treatment in testicular cancer should be made with respect to the pretreatment characteristics and to the results of the prior chemotherapy and particularly to the interval - from prior treatment to secondary treatment.

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Uro 26

DISSEMINATED TESCICULAR CANCER WITH BULKY DISEASE: RESULTS OF A PHASE-II STUDY OF THE AIO WITH CISPLATINUM ULTRA HIGH DOSE/VP16/BLEOMYCIN

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In this phase-II study the 3-drug-combination Cisplatinum ultra high dose/Etoposide(VP16)/Bleomycin was investigated in pts. with bulky disease defined as follows: Abdominal mass more than 10 cm Ø, mediastinal mass>5 cm, lung metastases more than 5 and a minimum of 2 cm Ø each, visceral, bone- or ZMS-metastases. Karnofsky-Index > than 50% and a-creatinine clearance > 60 ml/min was required. Dosage and schedule: Cisplatinum 35 mg/m² i.v. (2 h-infusion) day 1 - 5, VP16 120 mg/m² day 1-5 divided in two daily dosages (2 h-infusion), Bleomycin 15 mg/m² i.v. bolus day 1,8,15. Cycles have been repeated on day 22 - 29 according to the bone marrow recovery, for 4 cycles. Surgery of all residual mass if possibel was required after induction chemotherapy. The CR-rate is 45% and additionally surgical NED are 25% with an overall CR/NED-rate of 70%, PR 20%, NC 1%, P 8%. Median duration of remission is 19+ (2-39+) mths. with no difference for chemically or surgically induced CR. Median duration of PR is 8+ (2-31+) mths. With a relapse rate of 8% after a median duration of 5 (2-14) mths. and the lethal toxicity after complete remission (2x lung, 1x ileus), 61% of the pts. are still living without tumor and 71% are living without progression of the disease and are potentially cured. The toxicity was severe with mainly bone marrow toxicity (leucocyte nadir 1.300, neurotoxicity 50%, skin toxicity 42%, lung toxicity 38% with 3 pts. dying of pulmonary fibrosis after and without surgery, ototoxicity 24%, sepsis 12%, reversible renal toxicity 13%, cardiac toxicity 8%. Conclusion: This regimen is very active in pts. with bulky disease of metastasized testicular cancer. 2/3 of the whole pt.-population are potentially cured, in contrast to 1/3 with conventional chemotherapy regimens. Particularly pts. with medium sized bulky disease have the most benefit. Pts. with very far advanced disease still are not as good with an overall disease free rate of 57% (47 pts.). For this subgroup still more active regimens have to be investigated, whereas for the subgroup with bulky disease in medium range this regimen can be defined as the treatment of choice, despite its toxicity.

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Uro 27

THYMIC HYPERPLASIA IN ASSOCIATION WITH TESTICULAR NEOPLASMS, CT DETECTION.

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Benign thymic hyperplasia has been described in several clinical conditions, such as after cardiovascular surgery, following the stress of severe burns, after the cessation of oral corticosteroids or after chemotherapy for lymphoma's, and in endocrinological disorders like hyperthyroidism, Addison's disease, and acromegaly. With the aid of a semiquantitative score system (0,1,2 or 3) thymic size and density were evaluated in 4 patient groups on routine CT scans of the mediastinum. Group 1 was composed of 100 patients with testicular neoplasms, whereas group 2 encluded 100 patients with other malignancies and group 3 100 patients without tumor. In group 4 52 patients suffering from Myasthenia gravis were reviewed. CT scans were evaluated at random, considering age related changes in thymic size and density.
The differences between the four groups were highly significant. The mean size in patients having a testicular neoplasm (1,54) was clearly higher as in patients belonging to group 2 (1,24) and group 3 (1,29). It was comparable to the average thymic size in Myasthenia patients (1,50). Considering the CT density, also highly significant results were obtained. Whereas the mean density in testicular tumor patients was 1,32 and in Myasthenia patients 1,40, this score was 1,10 for group 2 and 1,20 for group 3 patients. Covariance analysis showed that these results are independent from sex.
Further investigations are necessary, to explain the cause of thymic hyperplasia in testicular neoplasms, and to determine its prognostic significance. It is of great clinical importance that a thymic hyperplasia as well as preaortal veins or other mediastinal tumors can be misinterpreted as metastatic lymph nodes.

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Uro 28

CORTICO-DIAPHYSEAL INDICES OF THE CLAVICLE IN DETECTING OSTEOPOROSIS AFTER BILATERAL ORCHIECTOMY.

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The cortical width of the right clavicle was measured in conventional chest X-rays, in 20 patients castrated for bilateral testicular tumours, and in a group of 50 healthy male subjects. All patients were aged between 20 and 45 years. The X-ray images were evaluated at random. The values for three so-called cortico-diaphyseal indices were calculated : 1)"combined cortical thickness" (CCT), 2)the "Barnett-Nordin index" (BNI) and 3) the "bone areas index" (IBA). In most of the 20 orchiectomized patients a minimum of 2 images were evaluated : one at the moment of the second orchiectomy, the other 0,5 to 14 years later (mean : 6,5 years). To raise the reliability of our measurements, intermediate images were evaluated, when available.
In spite of a regular Testosterone substitution therapy with Testosterone-oenanthate or Testosterone-undecanoate a progressive loss of bone mineral content was noted in 18/20 patients. In 9/12 patients that were orchiectomized more than 3 years ago, an osteoporosis could be diagnozed. From 8 patients controlled less than 3 years only 3 had pathological indices. All but one patient were treated with usual doses of Testosterone, and Testosterone blood levels were "normal".
In the group of 50 healthy patients only 2 had abnormal low indices for their age, showing the reliability of the method.
In conclusion, with this study we have detected with a simple and reliable radiological method that in patients treated for a bilateral testicular tumor by operation, in spite of regular Testosterone substitution, an early osteoporosis must be feared.

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