Sof 12**FIRST-LINE COMBINATION CHEMOTHERAPY IN ADVANCED SOFT TISSUE SARCOMA (STS) WITH 4'-EPIDOXORUBICIN (4'-EPI-DX) AND CIS-PLATIN (DDP).**

W. Mair, H. Sauer, U. Fink, H. Ruckle, M. Schulz and W. Wilmanns

The purpose of this study was to determine the efficacy and safety of the combination of 4'-Epi-DX and DDP as antitumour therapy of soft tissue sarcoma. Included were patients with age ≤ 60 , performance status ≥ 2 (WHO-scale), measurable tumour lesions, no signs of congestive heart failure, no previous cytotoxic treatment. Treatment plan: day 1: 4'-Epi-DX 45 mg/m² i.v.; day 2: 4'-Epi-DX 45 mg/m² i.v., 90 mg DDP i.v. every 3-4 weeks, toxicity permitting. An escalation of 4'-Epi-DX was allowed (10 mg/m²) if WBC-nadir $> 2000/\text{mm}^3$ and platelet-nadir $> 70.000/\text{mm}^3$. From II/1984-X/1985 27 pts. entered the study. 26 pts. were evaluable for response (1 early death) and all 27 pts. were evaluable for systemic toxicity. Response: Objektive remissions were observed in 10 of 26 pts. = 38%. There were 4 CR after 3-6 courses. Duration of response: median $\approx 6^+$ range 5⁺-8⁺ months. PR was seen in 6 pts. after 2-4 courses. Duration of response (months): median=3,5⁺ range=2-7⁺. NC was watched in 12 pts. after 3 courses. Duration of response: median=4,5 range=2-10 months. PPD was seen in 4 pts.

Toxicity: Hematotoxicity: 56 cycles in 15 pts. were evaluable for hematotoxicity (nadir-values): WBL-depression grade 0 in 7 cycles, grade 1 in 7 cycles, grade 2 in 24 cycles, grade 3 in 17 cycles and grade 4 in 1 cycle; platelet-depression grade 0 in 49 cycles, grade 1 in 3 cycles and grade 2 in 4 cycles. Organ-related toxicity: Neurotoxicity was observed in 4 pts. grade: 1,2,2,3. Alopecia was seen in all pts. (grade: median=3, range=1-3). 4 pts. refused further chemotherapy because of unmanageable nausea and vomiting. Chemotherapy was finished in 1 pt. because of possibly beginning cardiomyopathy after 10 courses. Another patient finished chemotherapy because of ototoxicity. Dose escalation according to protocol was done in n=34 courses of n=108 overall-courses. Dose reduction because of toxicity was done in n=12 courses. There was no difference in the rate of dose escalation in pts. with CR and PR as compared to pts. with NC and PPD. In conclusion: 4'-Epi-DX and DDP is effective in the treatment of advanced soft tissue sarcoma but the overall results don't seem to be better, than with established treatment. Toxicity is sometimes treatment limiting, but not definitively unacceptable.

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Sof 13**COMBINED SURGICAL AND RADIATION THERAPY OF SOFT TISSUE SARCOMA - A RETROSPECTIVE ANALYSIS OF 123 CASES**

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Between 1.1.'76-30.6.'84 123 pat.were operated with the diagnosis of soft-tissue sarcoma. 70 % of these pat.had been operated elsewhere before. Our surgical therapy were local excision (31) (margin 0-1 cm), wide excision (22) (margin 1-5 cm) compartment resection (9), amputation (2) and subtotal excision (50). 46 pat.(40%) were also treated with different modes of irradiation: neutrons (16), photons (25), other (5). All pathological sections were reclassified in order to try a grading with the parameters: subjective grading, mitosis, necrosis, cellularity and polymorphism. At time of inquiry in summer 1985 64 pat.(52%) were dead already. From the 59 living pat.41 (33%) had no evidence of disease. In 46 % of all cases (57 pat.)distant metastases were found.The mean follow up period was 57 mo.. The 5 yrs.survival of all pat. was 57%. The results were critically examined and analysed regarding correlations of survival times, local recurrence rates and rates of distant metastases. We could verify significant correlation of survival time with pathological parameters and different therapies. From our data we conclude that grading is the decisive parameter for survival time. The rate of metastases also increases with pathological malignancy grade. Survival time seems to be independent from tumor localization and histological dignity. So far local recurrence rates after wide excision and compartment resection are distinct less than after local excision, independent from irradiation. Abt.f.Allg.Chir.des Universitätsklinikum Essen, Hufelandstr. 55, 4300 Essen 1

Sof 14**TREATMENT RESULTS OF MALIGNANT HAEMANGIOPERICYTOMA AND ANGIOPLASTIC SARCOMA**

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We report about the retrospectively analyzed records of 45 patients with malignant haemangiopericytoma or angioplasic sarcoma treated at the Radiologic Department of the University of Münster from 1960 until 1984.

There were 18 patients with haemangiopericytoma and 27 patients with angioplasic sarcoma. The average age of the haemangiopericytoma patients was double pointed with the first peak between the 10th and 20th year of age and the second peak between the 50th and 60th year of age. 74 % of the patients with angioplasic sarcoma were between 50 and 80 years old. 21 patients had a maximum tumor-size of less than 5 cm in diameter and a negative status of lymph node involvement. This group of patients has to be discussed separately. 3 patients with haemangiopericytoma and 11 patients with angioplasic sarcoma had advanced tumor involvement. In these cases a surgical intervention was not possible. Primary radiation therapy with palliative aim was done in these patients. 13 patients with haemangiopericytoma (72%) and 15 patients with angioplasic sarcoma (55%) have been treated with operation and postoperative radiation therapy. The target volume of all patients is supposed to be the local tumor volume and the regional lymph node area. The reference dose is supposed to be 50 to 60 Gy due to the tumor volume, applicated in a split course technique with daily single doses of 2 Gy and a weekly dose of 10 Gy. 9 of the 45 patients (20%) received adjuvant chemotherapy in which Vincristine and Adriamycine were part of the drug-combination. 5 patients with haemangiopericytoma (27%) and 2 patients with angioplasic sarcoma (7%) developed local recurrences. 7 patients with haemangiopericytoma (39%) developed haematogenous metastases,six times the lungs have been involved and one time the brain. Radiologische Klinik und Poliklinik der Universität Albert-Schweitzer-Str. 33, D-4400 Münster

Sof 15**METABOLISM OF PTERIDINES IN PATIENTS SUFFERING FROM KAPOSI'S SARCOMA.**

H.J.Zeitler, B.Andondonskaja-Renz, Ch.Luderschmidt, C.Schießel, P.Spiegel and J.Nikolay.

Reduced pteridines serve as coenzymes for different enzymatic reactions in mammalian tissues. Dihydroneopterin triphosphate is an intermediate in the biosynthesis of tetrahydrobiopterin. In some diseases the activation of T-lymphocytes is accompanied by release of the pterin neopterin from macrophages/monocytes under control of T-cell factors. Compared to healthy controls in patients suffering from malignancies, lymphadenopathia and AIDS, alterations of some pteridines were found in blood cells and in body fluids.

In this study blood cell fractions (white cells; erythrocytes) and body fluids of patients suffering from sarcoma idiopathicum haemorrhagicum multiplex (KAPOSI's sarcoma) were analysed during therapy for 9 pteridines with a highly sensitive multiple-assay procedure (H.J.Zeitler and B.Andondonskaja-Renz, in Methods in Enzymology, vol. 122, 273, 1986) for the HPLC-analysis with fluorometric detection.

While the patients being investigated were under treatment, the data obtained from them (HTLV III, negative; T4/T8 > 1.8 ; no virus infections) demonstrate partly significant alterations of some pteridines: e.g., xanthopterin, neopterin, monapterin, biopterin, pterin. The found increase of the plasmatic neopterin during treatment may be related to an increased immune response.

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