courses of chemotherapy have been administered to 35 pts. After the first course 18/35 pts developed leukopenia grade 4 and 7 pts had non fatal febrile episodes necessitating antibiotic therapy. These 18 pts received additional 54 courses of chemotherapy followed by G-CSF. Although 24 episodes of leukopenia grade 4 were noticed, only one patient developed a febrile infection. 17/35 pts continued treatment after the first course without support of G-CSF. Four of them developed leukopenia grade 4 after the second and third course, respectively, so that only 13 pts received all cycles of chemotherapy without G-CSF. None of several clinical parameters, such as pts' sex and age, performance status, localization of metastases or WBC before treatment could predict the probability of development of leukopenia grade 4. So far, response rates are: CR 6%, PR 24%, SD 38%, and PD 32%. *Conclusion:* The above described regimen is a hematotoxic combination. However, it can be given to about 30% of adult pts with metastatic STS without support of G-CSF. With regard to the high cost of G-CSF we believe that it is justified to administer the first course of this chemotherapy without support of G-CSF. However, under these conditions, the immediate initiation of antibiotic treatment in cases of fever must be guaranteed.

867 PUBLICATION

SUPERFICIAL SOFT TISSUE SARCOMAS OF THE ADULTS

L. Cany, E. Stöckle, J.M. Coindre, A. Ravaud, G. Kantor, N.B. Bui
Institut Bergonié, 180, rue de Saint-Genès, 330746 Bordeaux Cedex, France

A series of 105 consecutive patients with superficial soft tissue sarcomas was analysed to assess the evolution of these tumors. There were 56 men and 49 women, aged 16 to 80 years (median: 56.4 years). Tumor localizations were 59 limbs (56.2%) and 41 non-limbs. The median tumor size was 3 cm (range 1 to 15 cm). Histological types were mainly malignant fibrous histiocyto-fibromas (n = 39 / 36.8%), leiomyosarcomas (n = 20 / 18.9%), dermatofibrosarcomas protuberous (n = 8 / 7.5%). According to the FNCLCC grading, tumor grade was: grade 3 = 24, grade 2 = 54, grade 1 = 28.

With a median follow-up of 112 months (range 19 to 321 months), the 5-year overall and disease-free survival were 75% and 46%. In monofactorial analysis, tumor grade is the only predictive factor for overall survival (grade 1 vs grade 2: $P = 0.02$; grade 2 vs grade 3: $P = 0.0002$), and for metastasis-free survival (grade 1 vs grade 2: $P = 0.05$; grade 2 vs grade 3: $P = 0.0006$). For grade 2 tumors, metastases occurred only after a deep, local recurrence. Age, tumor size, tumor localizations were not statistically significant. For the local relapse-free survival, tumor size (<5 vs $\geqslant 5$ cm) was the only predictive factor ($P = 0.0006$).

868 PUBLICATION

IMPACT OF LOCAL RECURRENCES IN SOFT TISSUE SARCOMA SURGERY

J. Høie, Ø.P. Solheim, A.E. Stenwig
Norwegian Radium Hospital, 0310 Oslo, Norway

Primary surgery in soft tissue sarcomas may be a dilemma between saving functions, abstain of mutilation and the potential of local recurrence. *Material:* 394 consecutive patients treated before 1990 have been analyzed.

Results: 100 patients presented with 150 recurrences; 79 patients with one recurrence only. In these 79, distant spread were seen concomitant with the local recurrence in 27, another 25 patients are free of disease following treatment of their recurrence, in 15 wide primary excisions were impracticable, and 6 patients were above their 80-ties. In 6 patients only, more extensive primary surgery should be advocated. In 7 patients with 4 to 8 episodes of recurrence, 2 died of distant disease, 1 of the local disease and 4 are free of disease. *Conclusion:* impact of local recurrence is moderate and may be accepted in lieu of mutilating surgery.

869 PUBLICATION

SUCCESSFUL AGGRESSIVE CHEMOTHERAPY IN PATIENTS WITH CHONDROSARCOMA: A REPORT OF FOUR CASES

P. Reichardt[1], S. Lentzsch[1], P. Hohenberger[2], B. Dörken[1]
[1]*Free University of Berlin, University Medical Center Rudolf Virchow, Robert-Rössle-Hospital, Department of Medical Oncology*
[2]*Department of Surgery, D-13122 Berlin, Germany*

Chondrosarcoma (CS) is uniformly reported to be resistant to any chemotherapy. A possible exception may be mesenchymal CS where occasional responses can be seen. Still the literature is scarce.

We report 4 patients treated with aggressive chemotherapy consisting of ifosfamide 2.5 g/m^2/day days 1 to 5, epirubicin 45 mg/m^2/day days 2 and 3 and Filgrastim 5 μg/kg/day s.c. days 6 to 15.

The first pt., a 35 ys. old female with a local recurrence and multiple lung metastases of a mesenchymal CS showed a CR of all detectable tumor manifestations after 6 cycles and is disease free for 14+ month. The second pt., a 28 ys. old male with multiple lung mets. of a CS is in continuous complete remission for 3+ month. Two additional patients with multiple lung mets. of a CS showed a stable disease for 13 and 3 months respectively after completion of 4 cycles. Both patients were put on oral chemotherapy with trofosfamide and are still under treatment.

We conclude that in selected cases of CS aggressive treatment should be considered, especially in younger patients.

870 PUBLICATION

DESMOID TUMORS (AGGRESSIVE FIBROMATOSIS): RETROSPECTIVE STUDY

O. Sousa, L. Carvalho, I. Silva, M. Bento, E. Vieira
Department of Radiation Oncology, Instituto Português de Oncologia 4200 Porto, Portugal

Although benign, desmoid tumors are locally aggressive neoplasms which infiltrate adjacent tissues, resulting in a high incidence of local recurrence after conservative resection. Between 1982 and 1993, 10 female and 5 male patients with histologically confirmed desmoid tumors were referred to Instituto Português de Oncologia—Porto. Age ranged from 12 to 47 years, with 2 newborn patients. Sites of disease included head and neck (n = 5), shoulder girdle (n = 3), chest wall (n = 2), abdomen (n = 2), extremities (n = 2) and back (n = 1). Patients were treated with surgery alone (n = 3) or surgery plus radiation (n = 12). Ten patients underwent radiation therapy for uncertain, positive margins or subtotal resection and 2 received planned postoperative radiation (microscopically negative margins), the majority being treated to a tumor dose of 40–70 Gy. With a medium follow up of 4.5 years, 14/15 patients are without evidence of disease and one died with progressive multicentric disease. In the irradiated group, 2 patients with infield recurrence and another with marginal recurrence were successfully treated with surgery. In summary, we believe that moderate doses of radiation can improve local control rates minimal long-term effects.

871 PUBLICATION

LOW EFFICACY OF 1 HOUR INFUSION-HIGH DOSE IFOSFAMIDE (IFO) IN PREVIOUSLY PRETREATED SARCOMA

M. Tubiana-Hulin, F. Cvitkovic, F. Lokiec, L. Bozec, A. Goupil, M. Janvier, F. Turpin, J. Rouëssé
Centre René-Huguenin, Saint-Cloud, France

Following Antman's report (Sem Onc 1990; 17: 7–15) underlining a better efficacy for fractionnated bolus Ifo infusion modality than the 24 h continuous infusion, as treatment in relapsing sarcoma patients, in October 93 we began a phase II study of high dose (HD) Ifo at 4 g/m^2/d on 3 consecutive days (12 g/m^2/cycle) given over 1 hour/d with Mesna (doses $\times$ 1.5) every four weeks until progression. Twelve patients (pts) were entered, their characteristics as follows: median age 40 ys (18–62); sex 5 M/7 W; PS $\leqslant$ 1 12/12 pts; histologic types: bone sarcoma (sarc) 3 (2 osteosarc, 1 fibrosarc), soft tissue sarc 9 (synovialosarc 3, liposarc 2, other types 4). Ten pts had metastatic disease and 2 a locally advanced inoperable sarcoma. All pts were pretreated with chemotherapy, (1 regimen, (rg) 6 pts, 2 reg, 6 pts), the MAID regimen in 7 of them. Four/9 pts treated previously with intermediate dose of Ifo 9 g/m^2/cy (IDIFO) had responded to it.

Results: 35 cycles (cy) were administered, median number of cy/pt = 2 (1–6). All pts were evaluable for response. The only PR (8 weeks duration) was a previous complete responder to IDIFO. Of the 3 minor responders observed (median duration 3 months), one had previously responded to IDIFO. Seven pts had disease progression and there was one stabilisation. Toxicity/cy included: 7 febrile neutropenia episodes during the 1st cy, 2 of them despite G-CSF prophylaxis; all following cycles were administered with G-CSF; 1 grade 3 and 1 grade 2 thrombopenia, 1 grade 3 renal insufficiency, 1 grade 2 haemorrhagic cystitis. CNS toxicity related to treatment was seen in 1 cy (1 transient confusion). There was no dose modification, and no toxic death occurred. All treatment discontinuations were caused by progressive disease, or patient refusal (1 pt).

Conclusion: Our experience with HDIFO (12 g/m^2/cycle) contrasts with other reports showing a good efficacy of HDIFO in refractory sarcomas (Brain ASCO 95 A1641). Our series consists of pts pretreated