serum and urine screening for renal toxicity, fertility (sex hormone levels, Inhibin B and anti-Müllerian hormone) and metabolic syndrome trait (lipid profile, fasting glucose).
Results: Currently 20 patients (70% male, median age 45 years [19−66], median follow-up 9.5 years [2−27], 65% OS) have been enrolled in the study. Eight patients (40%) reported ongoing fatigue, 5 (25%) were unwillingly unemployed and 2 (10%) reported involuntary childlessness. In 2 patients a subclinical cardiomyopathy was found with a left ventricle ejection fraction of 40% and 47%, respectively (N>55%). Only one patient with metabolic syndrome was identified. Low bone mineral density (osteopenia or osteoporosis) was found in 12 patients (60%), major hearing impairments in 4 (20%). Renal toxicity was also frequently found with a glomerular filtration rate $\geqslant$1 SD below the age- and genderspecific reference value in 6 patients (30%) and tubular nephropathy in 12 (60%).
Conclusions: The prevalence of long-term toxicity was high in the first 20 adult OS en ES survivors included in this study. The most striking findings were 2 cases of previously undetected cardiomyopathy, tubular nephropathy in more than half of the patients and – unexpectedly – low mineral bone density in 60% of the patients. These findings have clinical relevance since therapeutic options are available to prevent further deterioration. In our opinion, survivors of ES and OS diagnosed and treated at adult age should be screened for late events in a systematic manner analogous to common practice in children's oncology departments.

9430 POSTER

Efficacy and toxicity of sorafenib in patients with advanced soft tissue sarcoma failing anthracycline-based chemotherapy

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Background: Sorafenib, an orally administered inhibitor of RAF-family serine/threonine kinases and tyrosine kinase receptors, has demonstrated promising results in the treatment of refractory advanced solid tumors, including soft tissue sarcoma (STS), in terms of disease control and toxicity profile. We performed a multicenter phase II study aimed to evaluate the efficacy and safety of sorafenib in patients with advanced STS progressing after anthracycline-based chemotherapy.
Methods: Patients with recurrent STS failing at least one line of chemotherapy and no relevant comorbidities were eligible for the study and received sorafenib 400 mg bid until progression or major toxicity. Patients who received the study drug for at least 4 weeks were considered evaluable for statistical analysis. Primary endpoint of the study was the rate of progression free survival (PFS) at 6 months; the overall clinical benefit, i.e. the proportion of patients achieving response (partial, PR, complete, CR) or stable disease (SD) lasting at least 3 months (RECIST criteria) was also evaluated. Toxicity was graded according to the NCI Common Toxicity Criteria V3.0.
Results: Among 74 patients enrolled in the study, at march 30, 2009, 40 and 44 patients were evaluable for response and toxicity, respectively. Most frequent pathologic subtypes were leiomyosarcoma and liposarcoma. About half of patients received sorafenib as third or subsequent line of treatment. Six-months PFS was observed in 10/40 (22.7%) while overall clinical benefit was documented in 24/40 patients (60%, CR = 0%, PR = 12.5, SD = 47.5). Most frequently reported adverse events were fatigue, anemia, weight loss, diarrhoea, hand-foot syndrome (HFS) and alopecia. Grade 3−4 toxicities included HFS in 15.9%, diarrhoea in 13.6%, anemia in 4.5% and mucositis in 4.5%.
Conclusion: Sorafenib is associated with antitumor activity and acceptable tolerability in patients with antracycline-refractory STS. Data from the whole patient population will be presented at the meeting.

9431 POSTER

The role of radiotherapy for aggressive fibromatosis

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Background: Aggressive fibromatosis is a benign mesenchymal tissue proliferation. Surgery is the preferred treatment but the infiltrative growth pattern predisposes to local recurrences if wide margins are not obtained. Repeat surgery may be morbid and risk further recurrences. Alternative approaches can therefore be considered. Radiotherapy (RT) is an option and single institution series have shown benefit of radiotherapy in terms of local control. Radiotherapy may also be considered as an adjuvant treatment for patients with high risk of local failure after surgery, particularly in surgically challenging anatomical areas.
Materials and Method: A retrospective review of all patients with fibromatosis, treated with conformal RT, seen at The Christie Sarcoma Clinic from 2000 to 2009 was performed. Data on patient characteristics, tumour site, RT and clinical outcomes was extracted.
Results: Forty-five patients with fibromatosis were identified. Eleven patients (six females and five males) received RT. Age range was 19−70 years. Tumour sites were upper limb girdle (4), head and neck (2), chest wall (2), lower limb (1), flank (1) and intra-thoracic (1). Primary treatment was RT in four inoperable cases and surgery in seven. Of these seven, three received adjuvant RT for high risk disease and four received RT for subsequent disease progression. Doses ranged from 45−56 Gy in 25−28 fractions (mean dose 47 Gy). Two patients were treated in an EORTC phase II study. Median follow up was 30 months (range 1−99 months). The 3 patients who had adjuvant RT were disease free at last follow up (median follow up 51 months). Of the remaining 8 who had progressive disease at the time of RT, 5 had continued response to treatment or stable disease with no additional systemic treatment. Three had progressive disease (2 outside RT field) at 10, 21 and 48 months after radiotherapy. Two required further systemic treatment and one stabilised without intervention.
Conclusion: The small numbers in this study reflect the rarity of this disease, so it is best managed within the multi-disciplinary soft tissue sarcoma team. Conformal radiotherapy may be a viable option for inoperable symptomatic disease or in relapsed cases, particularly in anatomically constrained areas, which risk causing considerable morbidity and limited chances of obtaining wide margins. Adjuvant radiotherapy merits further research.