



## **Soft tissue sarcoma; a Plastic and Reconstructive Surgery experience**

Bains RD, Magdum A, Platt AJ, Stanley PRW

Department of Plastic and Reconstructive Surgery, Castle Hill Hospital, Cottingham, Hull

### **Objective**

To review the sarcoma service in Hull and East Yorkshire with specific regard to those cases being managed by the Plastic Surgery department.

### **Brief description**

We performed a retrospective review of case notes for all sarcomas treated by our department during the period 1985-2009. Patients treated primarily by other surgical specialities were excluded from the study, as were those where adequate notes were not available.

The database contained a total of 435 patients with a diagnosis of sarcoma. Of these 112 were treated at the Plastic Surgery department over a period of 12 years from December 1997 to December 2009. Other departments treating these patients were – General Surgery, Urology, Gynaecology, Orthopaedics and Thoracic Surgery.

The patients treated in our department consisted of 67 males and 45 females. The age range was 20 -100 years with a median age of 70. Histological diagnoses were DFSP(n=12), atypical fibroxanthoma (n=4), chondrosarcoma (n=2), angiosarcoma (n=4), malignant fibrous histiocytoma (n=4), liposarcoma (n=11), leiomyosarcoma (n=18), rhabdomyosarcoma (n=3). Distribution of anatomical sites affected were head and neck (n=17), upper limb (n=18), lower limb (n=56), trunk (n=21). Large tumours (greater than 8 cm) n=29, deep tumours n=48, and high grade (Trojani 3) n=33.

Patients were treated with surgical excision and postoperative radiotherapy in the high grade group. A range of reconstructive procedures were required from skin grafting to functional muscle transfer and free flap reconstruction and images of these procedures will be presented.

Total number of deaths in the group were 21, 7 of which were not cancer related. Deaths in the high risk groups was 6 (high grade), 9 (deep tumours) and 7 (tumour size > 8 cm). There were 6 survivors from 11 in the group with all three of these risk factors.

### **Conclusions**

A multidisciplinary approach to the management of this group of patients is essential to optimize outcomes. Surgical resection with adequate subsequent reconstruction maximizes the likelihood of prompt recovery of function and allows aggressive adjuvant therapy when required.