



P6:105

## Oncological outcomes of osteosarcomas in the upper distal extremity

Anup Pradhan<sup>1</sup>, Robert Grimer<sup>1</sup>, Adesegun Abudu<sup>1</sup>, Roger Tillman<sup>1</sup>, Simon Carter<sup>1</sup>, Lee Jeys<sup>1</sup>

<sup>1</sup>Royal Orthopaedic Hospital, United Kingdom

### Background

Osteosarcomas rarely arise in the upper distal extremity. Few studies have assessed the outcomes of osteosarcomas in this location and there are considerable challenges in surgical management. This study looks at the oncological outcomes of patients with osteosarcomas in the upper distal extremity managed at a regional tumour centre in the United Kingdom.

### Methods

The centre database was used to identify all patients with osteosarcomas in the elbow or distally between 1985 to 2012. Patient, tumour, treatment and outcome data was collected from the database and medical records.

### Results

30 patients were included in this study. There were 14 males and 16 females with a mean age of 36.4 years (9 to 90). 18 osteosarcomas were located in the forearm bones (60%), 9 in the elbow (30%) and 3 (10%) in the hand. The two most common sub-diagnoses were parosteal (28%) and osteoblastic osteosarcomas (16%). Local excision was carried out in 15 patients (51.7%), 4 patients underwent endoprosthesis replacement (13.8%) and 9 amputation (31%).

The overall risk of local recurrence was 14.4% in this series with risk increased by older age, grade and type of tumour. The overall survival rate at five years was 67% and was related to the grade, type of the tumour, type of surgery and patient age.

### Conclusion

This series has shown that patients with osteosarcomas of the upper distal extremities have favorable outcomes with current treatment methods. It highlights that tumour characteristics and patient age impact both on local control and overall survival.

*E-mail (main author): anup925@hotmail.com*