**PP-020**

**The ROMA-Integra prosthesis: a new solution for reconstruction after proximal femur resection for secondary tumors**

A. Luzzati¹, G.M. Scotto¹, N. Salducca², R. Biagini², C. Zoccali²  
¹ Galeazzi Orthopaedic Institute, Milan, Italy  
² Regina Elena National Cancer Institute, Rome, Italy

**Introduction:** Femurs are common sites for oncological disease, both primary and secondary. In case of metastatic lesion the proximal third and moreover the femoral neck and head are the most frequent site of bone metastases after spine. Even if medical therapies and radiotherapy have to be considered the mainstay of the treatment, surgery still plays an important role for oncological and biomechanical purposes. Resection of the lesion is mainly indicated in cases of long life expectancy, femoral neck and head metastases or in cases of important loss of bone. Several prostheses are commercially available in the literature but unfortunately the most of them are expensive, don't allow to spare the great and little trochanters and don't allow to reinforce the entire segment in cases of minimal resection. Our intent is to present the first results of the reconstructions with "Resection Oncological Modular Arthroplasty-Integra" prosthesis after proximal femur resection for metastases.

**Methods:** The first 30 prostheses ROMA-Integra performed at the Oncological Orthopedic Department of the Regina Elena National Cancer Institute of Rome (Italy) and of the Galeazzi Orthopedic Institute of Milan (Italy) were enrolled. Main outcomes were considered the length of the hospital stay, the complication rate and the function at six months of follow-up valued by MSTS-score. The results were confronted to those of a second cohort with similar demographic and clinical characteristics whereof reconstructions were performed with other prosthetic systems.

**Results:** The two groups obtained similar results regarding hospital stay, complications rate and function at six months of follow-up.

**Conclusion:** The ROMA-Integra prosthesis can be considered a suitable option for reconstruction after proximal femur resection; nevertheless its cost is consistently lesser so that it could be particularly adapt for metastatic patients and for decreasing the economic impact on the health system.