PP-014

Total femoral replacement for primary sarcomas. Short term results

R. Garcia-Maroto, L. Serrano, **J. Garcia-Coiradas**, I. Soler, L. Lopez-Duran, J.L. Cebrian
Hospital Clinico San Carlos, Madrid, Spain

Introduction: Total femoral replacement represents a possible solution for the treatment of femoral sarcomas that require large bone resections when limb sparing surgery is elected. The objectives of this study were to assess the clinical and functional short term results of three patients surgically treated in the Hospital Clinico San Carlos (Madrid) of femoral bone tumors by a total femoral replacement.

Material and Methods: The sample includes three male patients diagnosed of osteosarcoma, Paget-related sarcoma and Ewing sarcoma, involving femoral epiphysis and diaphysis. Surgeries were performed in 2012, by total femoral replacement. Two of the patients had previous surgeries including allograft and reconstruction for limb salvage, but failed with bone recurrence. Lateral femoral approach was performed, with full femoral excision and total femoral replacement, including total hip arthroplasty and total knee arthroplasty (Link). Radiographic evaluation with orthogonal weight bearing x-rays and functional assessment with Toronto Extremity Salvage Score (TESS) were performed postoperatively.

Results: Free range of motion excluding adduction started in the immediate postoperative period. Partial weight bearing was allowed two weeks after surgery, using crutches and a hip abduction orthesis for four weeks after discharge. There were no complications of surgical wounds. There was one sciatic nerve palsy recovered clinical and elecrtromyographilly within the first six months after surgery. No hip dislocations were found.
Postoperative teleradiographies showed between 3 and 1 cm of lenght discrepancy (median: 1 cm), necessary to achieve hip stability, due to the large tumoral resections that were required. All of the patients walk pain free with a cane, 6 months after surgery. TESS media was 79.53%.

Conclusion: All of the cases undergoing total femoral replacement have evolved without major complications, and are able to walk with a cane and independent for activities of daily liveng. Total femoral replacements in our Service provide satisfactory short-term results in selected patients with malignant bone tumors that require extensive resections patients.