

Modular Megaprosthesis for Proximal Femoral Tumors

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ABSTRACT

Introduction : Limb salvage surgery is the preferred treatment for proximal femoral tumors. The use of modular prosthesis following resection of the tumor is the preferred method, a procedure that is technically demanding.

Objectives The resection of tumor at the level of proximal femur results in loss of abductors and other musculature necessary for hip stability. This often leads to a higher instability rate. Hip dislocation is a recognized problem after the use of megaprosthesis, with rates of dislocation varying from 1.7% to around 28%.

Methods: Between March 2003 and March 2008, fifteen patients in our series had resection of the proximal femoral tumor and implantation of a modular megaprosthesis, using a bipolar acetabular cup. There were seven women and eight men, with a mean age of 37 (18-68) years. The diagnoses were osteosarcoma (2), chondrosarcoma (8), MFH (2) and GCT (3). All patients had a complete tumor workup prior to surgery that included routine blood work, bone scan, CT of the chest, and MRI of the femur. All patients had an open biopsy. They were given preoperative radiotherapy and chemotherapy as required.

Results: The mean follow-up was 2.7 (range 5 months- 5 Ys) years. Two patients died of causes not related to the prosthesis. The postoperative Musculoskeletal Tumor Society score (MSTS) score was 19 (range 12-26) for the remaining 13 patients. There were one aseptic loosening, No infections, and No local recurrence.

Conclusion: Proximal femoral modular megaprosthesis is a good option for reconstruction after resection of proximal femoral tumours.