

PERIPROSTHETIC VANCOUVER B TYPE FEMORAL FRACTURES TREATMENT WITH LONG FEMORAL STEM: RADIOLOGICAL AND CLINICAL OUTCOMES

Begkas D., Chatzopoulos S., Panagopoulos P., Iliadis I., Lymaxis E., Papageorgiou A., Giannakopoulos A., Pastroudis A.

6th Orthopaedic Department, Asclepieion Voulas General Hospital, Athens, Greece

Aim: The number of periprosthetic femoral fractures are becoming increasingly common together with the increase of total hip arthroplasties (THA) and hemiarthroplasties (HA) and the aging osteoporotic population. These fractures are a major complication and their treatment is challenging. The aim of this study was to evaluate the radiological and clinical outcomes of their treatment.

Material-Method: We conducted a retrospective review of 16 patients with a periprosthetic Vancouver B1, B2 and B3 fracture that were admitted in our department between 2016 and 2018 and treated with a long femoral stem revision. All patients were followed up at 1, 2, 3, 6 and 12 months postoperatively. Their radiological evaluation was based on plain X-Rays using the Beals and Tower's criteria and their clinical evaluation on Visual Analogue (VAS), Harris Hip Score as well there incidence of complications.

Results: Out of the 16 patients, 12 were female, 4 male, 10 were around a THA and 6 around a HA. Their mean age was 74 years (58 to 83). Three fractures were classified as Vancouver B1, 6 as B2 and 7 as B3. All fractures achieved union between 2 to 8 months after the fractures (mean 4 months). The Beals and Tower's criteria were excellent in 5 patients, good in 8 and poor in 3. The mean Visual Analogue Scale at 2 months after the fracture was 34.2 in comparison with 65.2 the score at one week after the fracture which was statistically significant. The mean Harris Hip Score postoperatively was 71.3. All patients survived until the end of the follow up. Three (18%) patients had a major complication and 6 (37.5) a minor one. None of the patients required a further operation.

Conclusions: Periprosthetic femoral fractures are a major complication of THA and HA and their treatment still remains challenging. Optimization of the surgical treatment and postoperative protocol is needed for the optimum outcome.