

CONSERVATIVE TREATMENT OF VANCOUVER B PERIPROSTHETIC FRACTURES: A TWO YEAR RADIOLOGIC AND CLINICAL FOLLOW UP

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

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

Aim: The number of hip hemiarthroplasties (HA) or total hip arthroplasties (THA) is steadily increasing together with the aging and osteoporotic population. One of their major complications are these of the periprosthetic fractures. Sometimes, these fractures in combination with a frail and with high comorbidities patient pose the question of the necessity of surgical treatment. The aim of this study is to retrospectively evaluate the radiological and clinical findings of patients with minimally displaced Vancouver B type fractures treated conservatively.

Material-Method: In a single orthopedic department, between 2013 and 2016, 13 patients (8 female and 5 male) with a mean age of 81.3 years, were admitted for a minimally displaced Vancouver B type fracture (10 around a HA and 3 around a THA). For these patients, conservative treatment was decided due to multiple comorbidities. Initially they were restricted to mobilization in the bed for 6 weeks, followed by assisted mobilization without weight bearing for a total duration of 3 months. The follow up was at 1 month after the fracture and then every month until fracture consolidation followed by every 3 months until 24 months after the fracture. The patients were evaluated based on plain X-Rays, Harris Hip Score, Visual Analogue Scale and complications rate.

Results: Fracture union was observed in 11 of the fractures with median fracture time 5 months (2 to 7). Mean Visual Analogue Scale (VAS) scores, showed great improvement between the first - 78.4mm and third month 35.5mm after the fracture ($p < 0.03$). The average Harris Hip Score at the end of the follow up was 68.2. The clinical outcome was similar for both patients with HA and THA. One patient died due to hemorrhagic stroke at 13 months after the fracture.

Conclusions: Although conservative treatment of periprosthetic Vancouver B type fractures in the elderly and low demand patients with high comorbidities provides modest results, it remains a viable option as it avoids the immediate and interim complications of surgical treatment.