Clinical Outcomes and Short-Term Dislocation Rates of Patients with Medial Hip Fracture Operated with Double Mobility Total Hip Arthroplasty versus Conventional Cup: Preliminary Report

Samuel Parra¹, Jose Manuel Bazan Pacheco, Rodrigo Mario Rivera, Yocelin Soledad Saavedra Baeza ¹Hospital Traumatológico Concepción

INTRODUCTION:

The optimal treatment of medial hip fractures is controversial. Total hip replacement is often associated with an increased risk of prosthetic dislocation. Alternatives are systems with a double mobility cup that would reduce this risk. The present study aims to investigate the clinical outcomes of patients with medial hip fractures treated with dual mobility versus conventional cups.

METHODS:

Prospective, randomized study that compares clinical results of patients over 60 years of age operated on for medial hip fracture with double mobility and conventional cup at Hospital Traumatológico de Concepción between August 2017 and July 2019 using a posterior approach. The presence of prosthetic dislocation episodes was evaluated between both groups at 3 and 6 months after surgery, which will be analyzed with T-Student. In addition, the patients were characterized with abbreviated mini mental, Barthel scale and Charlson index prior to surgery. Follow up with a double-blind functional assessment of the modified Harris score was performed at 3 and 6 months after surgery. RESULTS:

Of a total of 95 patients, 7 died and 5 lost their controls; the mean age was 78.2 years; 82% are women; 83 patients completed the 6-month follow up. Of the 38 patients operated on with a double mobility cup, none presented episodes of dislocation versus 4.8% (4 patients) of the 45 operated on with a conventional cup. Finally, regarding the Harris Hip Score, 66.2% present excellent and good results, 24% regular, and 9.6% poor functional results.

DISCUSSION AND CONCLUSION:

In our short-term series, the double mobility cup presents a lower rate of prosthetic dislocation events when compared to the conventional cup.