

Free University of Brussels

" Dual Mobility Total Hip Arthroplasty for Patients Under 65: A Comprehensive Review and Clinical Analysis of 162 Cases "

Authors: Dr DIABY Soufiane, MD; Dr BRUYNSEELS Kevin, MD; Dr JENNART Harold, MD

Orthopedics & Traumatology Unit (CHU-Tivoli)

Summary

Background:

Total hip arthroplasty (THA) is a common procedure for hip joint degeneration. But remains associated with potential complications such as dislocation, loosening, especially in patients under 65, where concerns about implant durability and stability are crucial. Dual mobility (DM) THA has emerged as a promising solution. This study reviews existing literature on DM-THA in this age group and presents outcomes from a clinical series.

Methods:

A thorough literature search identified studies reporting DM-THA outcomes in patients under 65. Additionally, a retrospective analysis of 180 DM-THA cases in our institution between 2005 and 2023 was conducted, assessing patient demographics, surgical details, radiological and clinical follow-up.

Results:

The literature review revealed limited studies on DM-THA in younger patients but suggested favorable outcomes. Our clinical series included 162 patients (mean age: 58.4 years), primarily females (61.7%) with osteoarthritis (79%). Follow-up averaged 49 months. Postoperatively, 92% reported significant functional improvement and pain relief, with low complication rates (86% experienced none). Revision rate was 6.8%, mainly due to infection, aseptic loosening, fracture, and instability.

Discussion:

Dual mobility total hip arthroplasty shows promise in patients under 65, offering favorable implant stability and functional enhancement. Our clinical data further support its efficacy and safety in this population. Long-term studies are needed to solidify DM-THA as a viable option for younger hip arthroplasty patients.