

HOPE-Trial: Hemiarthroplasty Compared To Total Hip Arthroplasty For Displaced Femoral Neck Fractures In Octogenarians; A 4-Year Follow-Up Of A Randomized Controlled Trial

Trauma / Hip & Femur Trauma / Surgical Treatment

Pontus Sjöholm¹, Ghazi Chammout², Paula Kelly-Pettersson², Sebastian Mukka¹, Olof Sköldenberg²

1. Umeå University, Umeå, Sweden
2. Karolinska Institute, Stockholm, Sweden

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Background

The choice of primary hemiarthroplasty (HA) or total hip arthroplasty (THA) in patients over 80 years of age with a displaced femoral neck fracture (FNF) remains under debate. The short term results published as 2-year follow-up did not find any differences.

Objectives

The aim of the present follow-up study was to compare the 4-year outcome of HA with those of THA in patients older than 80 years.

Study Design & Methods

A prospective, randomized, single-blinded trial was conducted between 2009 and 2016. 120 patients with an acute (<36 h) displaced FNF were randomly assigned to HA and to THA with a mean age of 85 years (80-94). The primary endpoints were hip function and health-related quality of life (HRQoL) at 4-years. Secondary endpoints included hip-related complications and reoperations, mortality, pain in the involved hip, activity of daily living and general complications.

Results

39 patients in the HA group and 39 patients in the THA group were still alive. There was a difference in hip function (Harris hip score) and in HRQoL in favor of the THA group at the 4-year follow-up. We found no differences between the groups regarding, hip-related complications and reoperations, activity of daily living and pain in the operated hip. Hip function, activity of daily living and pain in the operated hip deteriorated significantly in both groups compared with pre-fracture values. The ability to regain previous walking function was similar in both groups.

Conclusions

We found a hip function in favour of THA when compared to HA in mobile elderly octa- and nonagenarians with a displaced FNF up to 4-years after surgery. THA is a suitable procedure in the middle-term for this selected group of mobile patients.