Comparing Total Hip Arthroplasty and Hemiarthroplasty for Treating Femoral Neck Fractures

For a femoral neck fracture (FNF), it is unclear whether total hip arthroplasty (THA) or hemiarthroplasty (HA) is the best option.

Data from the Australian Orthopaedic Association National Joint Replacement Registry (AOANJRR)

Adults (60–85 years old) treated with contemporary, evidence-based arthroplasty options for FNF

- N = 4,551 (THA)
- N = 29,714 (HA)

Cemented femoral stems

THAs with femoral head diameters ≥36 mm

Dual-mobility articulations

Rates of revision (aseptic/failures/dislocation)

Statistics: competing risks for death, adjusting for confounders

- Women aged 80–85 years (HR = 1.56 [95% CI, 1.03 to 2.35])
- Men aged 75–79 years (HR = 1.61 [95% CI, 1.05 to 2.46])
- Men aged 80–85 years (HR = 2.73 [95% CI, 1.89 to 3.95])

No age-/gender-specific difference in the rate of revision for dislocation between THA/HA

Is the Revision Rate for Femoral Neck Fracture Lower for Total Hip Arthroplasty Than for Hemiarthroplasty? A Comparison of Registry Data for Contemporary Surgical Options

Hoskins et al. (2022) | DOI: 10.2106/JBJS.21.01256

Women <75 years old show relatively better revision outcomes for THA and women ≥80 years old and men ≥75 years old derive benefits from HA for FNF

Rate of revision for THA vs HA

- Lower for women aged 60–69 years (HR = 0.58 [95% CI, 0.39 to 0.85])
- Lower for women aged 70–74 years (HR = 0.65 [95% CI, 0.43 to 0.98])

HR: hazard ratio; CI: confidence interval

© 2022 Journal of Bone & Joint Surgery, Inc. (JBJS)