

Does surgeon experience affect patient-reported outcomes 1 year after primary total hip arthroplasty?

A register-based study of 6713 cases in western Sweden.

Authors

Per Jolbäck^(1,2,5), Ola Rolfson^(1,2,4), Maziar Mohaddes^(1,2,4), Szilárd Nemes⁽¹⁾, Johan Kärrholm^(1,2,3), Göran Garellick⁽²⁾, Hans Lindahl^(1,2,3)

1. *Swedish Hip Arthroplasty Register, Gothenburg, Sweden*
2. *Department of Orthopaedics, Institute of Clinical Sciences, The Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden*
3. *Department of Orthopaedics, Skaraborgs Hospital, Lidköping, Sweden*
4. *Department of Orthopaedics, Mölndals Hospital, Sahlgrenska University Hospital, Mölndal, Sweden*

Background and purpose: Several studies have reported on the influence of various factors on patient-reported outcomes after total hip arthroplasty (THA) but very few have focused on the experience of the surgeon. Our main objective was to investigate any association between surgeons' experience and patient-reported outcome (PROs) 1 year after primary THA.

Patient and Methods: Data from medical records of 10 hospitals in western Sweden was merged with the data from Swedish Hip Arthroplasty Register (SHAR). Information on year of license to practice and orthopedic specialist certificate for the surgeons were obtained from National Board of Health and Welfare. Experience of the surgeons was divided into four groups: trainee, <8 years, 8-15 years and >15 years (reference group) after specialist certificate. We used Chi-Square Test, Kruskal-Wallis H Test and Linear Regression.

Results: 8158 THAs were identified in the hospital medical records. We identified the surgeons' level of experience in 8116 cases. In 6713 cases, data on PROs both preoperatively and at 1 year follow-up were obtained from SHAR. There were significant differences in patient age ($p<.001$), ASA- ($p<.001$) and Charnley-classification ($p<.001$), indication for implantation ($p<.001$) and fixation technique ($p<.001$) but not for sex or BMI. At 1 year follow-up, there were no differences in, EQ5D Index, EQ VAS or pain. Those operated by trainees reported marginally worse satisfaction compared with the reference group ($p<.001$).

Conclusion: There were considerable differences in patient demographics depending on surgeon experience. Patients of orthopedic trainees reported slightly lower satisfaction with the outcome of surgery compared to patients of the most experienced orthopedic surgeons.