

TOTAL HIP REPLACEMENT IN IMMIGRANTS AND SWEDISH PATIENTS

Evaluation of preoperative care, socioeconomic background, patient-reported outcomes and risk of reoperation

Akademisk avhandling

som för avläggande av medicine doktorsexamen vid Sahlgrenska akademien vid Göteborgs Universitet kommer att offentlig försvaras i Aulan Förmaket, Vita stråket 12, Sahlgrenska Universitetssjukhuset/Sahlgrenska, torsdagen den 18 december 2014, kl.13:00

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AVHANDLINGEN BASERAS PÅ FÖLJANDE DELARBETEN:

- I. **Influence of ethnicity and socioeconomic factors on outcome after total hip replacement.**
Krupic F, Eisler T, Garellick G, Kärrholm J.
Scandinavian Journal of Caring Sciences. 2013; 27 (1): 139-146.
- II. **Preoperative information provided to Swedish and immigrant patients before total hip replacement.**
Krupic F, Määttä S, Garellick G, Dahlborg Lyckhage E, Kärrholm J.
Medical Archives. 2012; 66 (6): 399-404.
- III. **The association between peroperative information and patient-reported outcomes one year after total hip arthroplasty in immigrants and patients born in Sweden.**
Krupic F, Rolfson O, Nemes S, Kärrholm J.
Submitted
- IV. **No influence of immigrant background on the outcome of total hip arthroplasty.**
140, 299 patients born in Sweden and 11, 539 immigrants in the Swedish Hip Arthroplasty Register.
Krupic F, Eisler T, Eliasson T, Garellick G, Gordon M, Kärrholm J.
Acta Orthopaedica. 2013; 84 (1): 18-24.
- V. **Different patient-reported outcomes in immigrants and patients born in Sweden.**
18,791 patients with 1 year follow-up in the Swedish Hip Arthroplasty Register.
Krupic F, Garellick G, Gordon M, Kärrholm J.
Acta Orthopaedica. 2014; 85 (3):221-228.



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Evaluation of preoperative care, socioeconomic background, patient-reported outcomes and risk of reoperation

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Gothenburg, Sweden 2014

Abstract

Total Hip Arthroplasty (THA) aims to reduce pain and improve mobility, function and quality of life in patients with osteoarthritis, when non-surgical treatment has failed. Despite good or excellent results in the majority of patients, some of them are dissatisfied. This variability in outcome is multifactorial. Preoperative information, hospital care and postoperative rehabilitation may be more demanding if the patient is not familiar with the domestic language, belongs to a cultural minority or lives in poor socioeconomic circumstances. This thesis aimed to investigate the influence of ethnicity and socio-economic factors on the outcome after primary THA. Demographic information and data relating the surgical procedure, patient reported outcome collected preoperatively and one year after the operation and any subsequent revision/reoperation were retrieved from the Swedish Hip Arthroplasty Register. Cross-matching with data from the Patient Register and Statistics Sweden was performed to retrieve information about comorbidities, cohabiting, education, and country of birth. Interviews and a self-administered questionnaire on given preoperative information, pre- and postoperative pain and patient satisfaction including the DASS 21 score for mental health of patients were also used. The interviews were analyzed using content analysis according to Graneheim and Lundman. The patients were analyzed in four groups (born in Sweden, the Nordic countries, Europe and outside Europe including the Soviet Union) or two groups (born in or outside Sweden). Patients from both groups in the qualitative study, expressed concern about inadequate pre-operative information on implants used, pain relief, choice of anaesthesia, no or too short a time to put questions to the surgeon and an overall stressful clinical situation. All the immigrant groups had more negative interference relating to self-care ($p \leq 0.02$), some immigrant groups tended to have more problems with their usual activities ($p \leq 0.05$) and patients from Europe and outside Europe more frequently reported problems with anxiety/depression ($p \leq 0.005$). Patients born abroad showed an overall tendency to report more pain on the VAS than patients born in Sweden. One year after the operation the immigrant groups reported lower values in all EQ-5D dimensions. After adjustment for covariates including the preoperative baseline value most of these differences remained apart from pain/discomfort and regarding immigrants from the Nordic countries, anxiety/depression as well. One year after the operation pain according to the VAS had decreased substantially in all groups. The immigrant groups indicated however more pain than those born in Sweden both before and after adjustment for covariates ($p < 0.001$). Patients born outside Sweden had generally a poorer mental health than those born in Sweden. The risk of revision and reoperation within a period of two years did not differ between immigrants and patients born in Sweden. The difficulties for the patients born outside Sweden may depend on cultural differences, communication problems and differences in indications. This patient group could benefit from improved pre- and postoperative information and other measures to facilitate and improve their rehabilitation.

Keywords: Swedish Hip Arthroplasty Register, patient-reported outcome measure, total hip arthroplasty, immigrants, health-related quality of life, EQ-5D, mental health.

ISBN: 978-91-628-9087-2

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