

Summary of research proposal LROI



Title:

Revision rates after shoulder hemiarthroplasty versus anatomical total shoulder arthroplasty in patients younger than 60 years: a cohort study with data from the Dutch Arthroplasty Register (LROI).

Authors:

JA van der Linde, E Steenbeek, B Hesselting

Abstract:

Controversy exists whether hemiarthroplasty (HA) or anatomical total shoulder arthroplasty (TSA) is the preferred treatment in younger patients with shoulder arthritis, fracture sequelae or osteonecrosis. This retrospective cohort study primarily aims to compare medium-term implant survival rates and secondarily aims to compare short-term pain and function between primary HA and TSA in these younger patients. All shoulders of patients in the Dutch Arthroplasty Register (LROI) between 18 and 60 years old will be included that underwent primary HA or TSA for osteoarthritis, post-traumatic sequelae, rheumatoid arthritis or osteonecrosis. The enrolment period will be 2014-2022 with a follow-up up until 2023. To adjust for potential confounders, all-cause revision surgery rates will be compared using cox proportional hazards analysis, and the numeric rating scale for pain and Oxford Shoulder Score one year postoperatively will be compared with a linear mixed-effects model. Missing data for potential confounders will be dealt with by performing tenfold multiple imputation.

Approval date: December 2023