Summary of research proposal LROI

Title:

Is smoking status associated with changes in outcome measures following total hip arthroplasty, total knee arthroplasty and unicondylar knee arthroplasty?



Authors:

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Abstract:

In 2019 a total of 33,248 total hip arthroplasties (THA), 25,859 total knee arthroplasties (TKA) and 4,888 unicondylar knee arthroplasties (UKA) were performed in the Netherlands. The demand for hip and knee arthroplasty is expected to rise in the near future. Predictors of outcome are required information for the surgeon before planning arthroplasty and essential for the patient to support in the decision to undergo surgery. Prevalence of tobacco use is decreasing worldwide, but over 20% of the Dutch population is smoking. Smoking increases the risk of revision surgery following TJA and is a risk factor for periprosthetic joint infection (PJI) following total joint arthroplasty (TJA). Smokers undergoing UKA are at higher risk for any wound complication and reoperation relative to nonsmokers in the first 30 days postoperatively.

The aim of this study is to investigate the association between smoking status and the outcome of arthroplasty (THA, TKA and UKA) in a large population-based cohort of patients. The primary outcome measures are defined as (1) revision rate and (2) patient-reported outcome measures (PROMs). Furthermore, we want to compare subsequent revision arthroplasty rates between smokers and non-smokers performed on the joint following failure of primary arthroplasty.

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