

Summary of research proposal LROI



Title:

Arthroplasty as a treatment for avascular necrosis of the humeral head, descriptive and survival analysis based on data from the Dutch Arthroplasty Register

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Abstract:

Avascular (osteo)necrosis of the humeral head (HHAVN) can be devastating ultimately leading to surgical intervention, which is mostly a joint replacement. HHAVN has multiple etiologies such as alcohol, trauma, sickle cell disease, chemotherapy and/or corticosteroids. Therefore HHAVN can already occur on a younger age, but mostly at the fourth or fifth decade. Different arthroplasty options are available including hemi, anatomical or reversed total shoulder arthroplasty. Previous studies show satisfactory clinical outcomes in short to long term follow up but these studies included posttraumatic HHAVN as well. It is demonstrated that inferior outcomes are seen after post-traumatic necrosis including revision surgery for failed open reduction and internal fixation (ORIF). Moreover different age groups are compared. Revision rates vary among previous studies looking at the results of arthroplasty indicated solely HHAVN, but these have a low sample size or short follow up. Other studies reported that results on arthroplasty for this indication is scarce. Of note, all of the previous studies have a population of less than 150 patients. Differences in patient characteristics, types of prostheses, and surgery characteristics of hemi shoulder, and anatomical and reversed total shoulder arthroplasties in patients with osteonecrosis of the humeral head based on Dutch Arthroplasty Registry data since 2014 will be described. Any differences in revision rates as well as functional outcome measures will be noted.

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