

Summary of research proposal LROI



Title:

The effect of surgical case volume on revision rates in Total Ankle Arthroplasty: a Dutch Arthroplasty Register Study

Authors:

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Abstract:

Total ankle replacement (TAA) has been gaining popularity in the past few years as a treatment of end-stage osteoarthritis in the ankle. Although TAA is considered superior to ankle arthrodesis (AA) concerning patient quality of life, it is not commonly available in the Netherlands. One of the reasons for this, is the complexity of the TAA procedure, requiring specific expertise. In TAA, the phenomenon of learning curve has been described previously, where risk of complications and revision is described throughout the learning curve. A Scandinavian study shows a three times lower risk for perioperative adverse events for the second five patients compared to the first five, using data of 10 different surgeons. Other studies show that the learning curve stabilizes around 30 cases, both postoperatively and at 5-year follow. To the best of our knowledge, learning curve studies based on registry data have not been performed.

This study therefore aims to investigate the association between surgical case volume and survival rate of the total ankle arthroplasty in the Netherlands using the Dutch Arthroplasty Registry.

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