

## **A Prospective Cohort-Study on the Return to Work and Function Two Years After Surgical Treatment of Tibiotalar Arthritis**

**Alastair S. Younger, MD, FRCSC, Andrea Veljkovic, MD FRCSC, Kevin Wing, BSc, MD, FRCSC, Murray J. Penner, MD, FRCSC, Oliver Gagné, MDCM**

**Category:** Ankle Arthritis

**Keywords:** Ankle

Arthritis

Work

Pain

Arthrodesis

Arthroplasty

**Introduction/Purpose:** Ankle arthritis is a debilitating condition. People who are affected by end stage ankle arthritis are as symptomatic as arthritis in other main articulations of the lower extremity, and often present with concurrent medical conditions and comorbidities. Once these patients cannot perform their job due to disabling arthritic ankle, they leave the workplace and require financial aid. The purpose of this study was to determine the work status before and after surgery for end stage ankle arthritis in the working age population. We hypothesized that middle-age patients at the time of surgery [55 years-old and younger] were able to go back to work within 2 years of their index ankle procedure and not depend on social / subsidized programs.

**Methods:** Since 2001, patients treated for end-stage ankle arthritis in three Canadian centers were offered to partake in the Canadian Orthopedic Foot and Ankle Society (COFAS) Prospective Ankle Reconstruction Database. The modalities of treatment included total ankle replacement and ankle arthrodesis (open and arthroscopic). A survey was given to patients at various points of the study, which included the MODEMS questionnaire from AAOS and SF-36. This study used the pre-operative survey, including the along with the same survey filled by patients 2 years post-operatively. Degenerative osteoarthritis, post-traumatic osteoarthritis and inflammatory arthritis requiring surgical intervention was the main inclusion criteria. Patients over 55 years- old at the time of surgery were excluded.

**Results:** This group had 211 patients of age  $47 \pm 8$  and was balanced as far as sex (113M) and side (102L). The employment rate for this group should be 79.2 per Statistics Canada. The employment rate prior to surgery was 56% and increased to 63% two years later. The additional 7% were on leave of absence or disability prior to surgery. At the two-year follow-up, 92 patients reported less pain with work, 88 patients reported that the surgery met their expectations and 78 reported minimal interference with their work. With regards to WCB, Disability and Social Security, 115 (56%) were never on any of the above, 41 (20%) were no longer on any two years post-operative and 9 (4%) entered at least one program.

**Conclusion:** The two-year follow-up after tibiotalar arthrodesis or arthroplasty in patients younger than 55 years-old shows that more people are able to get back to work than go off work. It also shows that more people are able to get off subsidized programs and that there is an overall satisfaction with regards to pain, inference with work and expectation. After surgery, this patient population still has a lower employment rate than the normal population. More research would be needed to better outline strategies that could reduce the disability within this group and maintain them in the workforce.

---

Foot & Ankle Orthopaedics, 1(1)  
DOI: 10.1177/ 2473011416500118  
©The Author(s) 2016