

Foot Pain is Common, but Frequently Improves 1 year after Total Knee Arthroplasty

David Carmody,
Geoffrey Keighley, Lucy Salmon,
Ka Martina, Leo Pinczewski,
Matthew Lyons,
Benjamin Gooden, Phil Huang,
Michael O'Sullivan, Justin Roe

Published:

Journal of Arthroplasty June 2022

Presented:

- *Arthroplasty Society of Australia ASM Noosa May 2022*
- *International Society of Orthopaedic Centers Conference – Milan, Italy November 2022*
- *Australian Orthopaedic Association Annual Scientific Meeting November 2021*



Background

Osteoarthritis (OA) frequently affects multiple joints through the lower limbs. As a result of proximal malalignment, reduced mobility, or referred pain patients with knee OA can present with a range of foot symptoms. Performing lower limb re alignment surgery in the form of TKA has been shown to improve ankle pain and hindfoot deformity in small series, but has not been adequately studied in a large series. This study sought to examine the incidence of foot pain in subjects undergoing total knee arthroplasty (TKA) and determine if foot symptoms improved following surgery

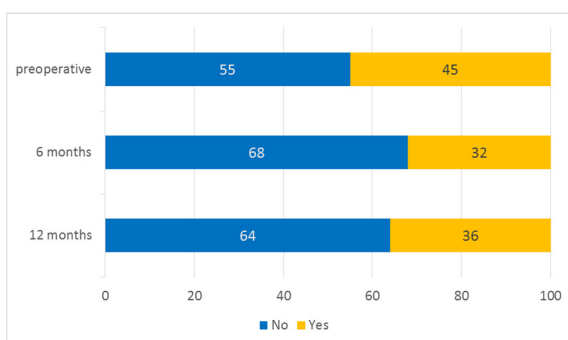
Methods

610 subjects undergoing TKA completed patient reported outcomes measures (PROMs) preoperatively, and at 6 and/or 12 months after surgery including the incidence and severity of foot or ankle pain, Knee Osteoarthritis Outcome JR Scores (KOOS), Oxford Knee Scores (OKS), EQ5D, and satisfaction.

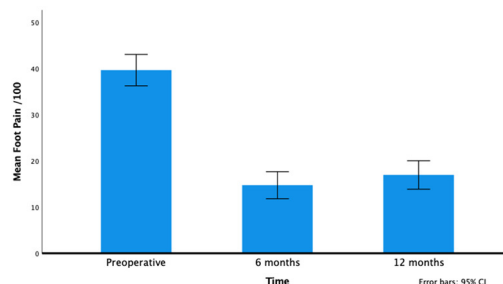
Results

Between 2019 and 2020, 610 underwent primary TKA and completed both preoperative and postoperative PROMs. The subjects were 48% female (n=290), had a mean age of 69 years, and had a mean BMI of 30.4.

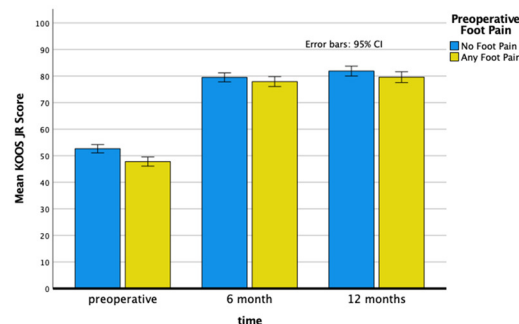
Foot or ankle pain was reported in 45% before, 32% at 6 months and 36% at 12 months after TKA.



Of those with preoperative foot pain, 42% at 6 months and 50% at 12 months reported no foot pain after TKA, and the VAS severity reduced from a mean of 4.0 before to 1.7 after surgery.



Those with preoperative foot pain had lower baseline KOOS (p=0.001), OKS (p=0.001), more depression/anxiety (p=0.010), but experienced equivalent post-operative KOOS, OKS and satisfaction with surgery, compared to those without foot pain.



Conclusions

Foot pain is a common symptom experienced in patients with OA of the knee, found in nearly half of all subjects undergoing TKA in our study. Foot pain was associated with worse preoperative knee symptoms, depression or anxiety and poorer general health. The incidence and severity of foot pain dropped significantly after TKA with those reporting preoperative foot pain, this was resolved after knee arthroplasty 50% of subjects. Those with preoperative foot pain experienced at least equivalent improvement in knee related symptoms and mobility compared to those without foot pain. The presence of foot pain should not be a deterrent to TKA.

This study was generously supported by

