

Ankle and Pilon Fracture Post Operative Rehabilitation: A randomized Control Trial Exploring a Simplified Wooden Block Protocol

ABSTRACT

Study Design:

Randomized Control Trial

Background

Ankle and pilon fractures are common traumatic injuries, representing 174 and 120-180 per 100K in adults in the US annually respectively. Following these injuries ankle pain, stiffness and functional impairments represent common complications. These complications can result in decreased functional ability for patients, and subsequent re-operations including anterior capsular release. Rehabilitation following these injuries is an area which can affect outcomes. We seek to explore a simplified home ankle rehabilitation protocol centered around ankle dorsiflexion with a wooden block, with goal of improving ankle dorsiflexion following these injuries, improving function and decreasing re-operation rates through increased compliance as compared to the AAOS post operation rehabilitation protocol.

Methods

A randomized control trial was begun in 2020 centered around patients who sustained a primary ankle or pilon fracture and underwent open reduction and internal fixation at our institution. Adult patients ages 18-65 were randomized to the standard AAOS or the Simplified ADF protocol at the initiation of weight bearing. Patients were followed at 1, 4, 12 weeks post immobilization removal, at which points a Lower Extremity Functional Scale, objective ankle dorsiflexion measure through an ankle lunge test and analog pain score were collected. A comparison between the 2 groups was established in both objective and subjective means through the data points collected.

Results

TBD

Conclusions

TBD