

Ten-Year Patient-Reported Outcomes After Surgical Treatment of Talus Fractures

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Purpose: There is limited literature on outcomes after modern treatment of talus fractures. Many prior studies are limited by a small number of patients and limited follow-up, and include radiographic outcomes only. The purpose of this study was to report long-term patient-reported outcomes after operative treatment of talus fractures.

Methods: This was a retrospective cohort study of all patients with a talus fracture treated surgically at a Level I trauma center between 2008 and 2018, with a minimum of 5 years of follow-up. Detailed demographic, injury, and radiographic data were collected. Attempts were made to contact all patients for long-term follow-up to collect the Foot and Ankle Ability Measure (FAAM) patient-reported outcome score.

Results: A total of 116 patients met inclusion criteria and were successfully contacted for follow-up. The average length of follow-up was 10.3 years (range 5.0-15.6, standard deviation [SD] 3.2). The mean age at time of injury was 38 (SD 10). 83 patients (72%) were male. 19 were open injuries. 37 (32%) were fractures of the body, 18 (16%) were fractures of the lateral process, 2 (2%) were of the posterior process, and the remaining 59 fractures (51%) were of the talar neck (17 Hawkins IIA, 27 IIB, 11 III, 4 IV). Analysis of the demographic and injury characteristics of the patients who were included versus those who were lost to follow-up showed no significant difference. 35 patients (30%) underwent reoperation, of which 11 were a salvage procedure (fusion or arthroplasty). Mean FAAM score at a mean of 10 years was 74.7 (SD 22). In patients who had not undergone a salvage procedure, mean FAAM score was 76.7 (SD 21.1). Factors associated with poorer FAAM score included open injuries, higher ISS, and older age. Hawkins classification, duration of follow-up, and radiographic arthritis or osteonecrosis were not associated with FAAM score. In multivariate analysis, only higher ISS remained associated with poorer FAAM scores.

Conclusion: In a large cohort of surgically treated talus fractures, FAAM scores at a mean of 10 years were better than anticipated based on current literature.