Wound Complications in Calcaneus Fractures Treated with the Sinus Tarsi Approach: Results in 164 Consecutive Fractures

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Category: Trauma

Keywords: calcaneus, sinus tarsi, fracture

Introduction/Purpose: The purpose of this study is to evaluate risk factors and complications associated with surgical treatment of calcaneus fractures using a sinus tarsi approach in a consecutive series of 164 displaced intraarticular calcaneus fractures treated with a sinus tarsi approach.

Methods: 150 patients with a total of 164 displaced intraarticular calcaneus fractures were treated by a single surgeon using a sinus tarsi approach. Age, nicotine use, diabetes, steroid use, time from injury to surgery were all recorded. Time of suture removal, postoperative antibiotics, local wound care and need for secondary surgery for wound problems were recorded.

Results: Average age was 49.5 years old. Follow-up averaged 309 days. 60 (39.2%) used nicotine, 14 (8.54%) were diabetics with 3 insulin-dependent, 6 used oral steroids or DMARDs, eight fractures (4.88%) were open fractures. Average time from injury to surgery was 10.63 days. Sutures were removed at an average of 16.25 days. 7 patients developed incisional complications. 6 were treated successfully with antibiotics and local wound care. 1 patient required secondary surgery for wound complications. There was no difference in patients treated less than 14 days or more than 14 days from injury. There was no difference in complications in smokers vs. non-smokers or diabetics vs. non-diabetics.

Conclusion: The sinus tarsi approach is a safe surgical approach with an acceptable complication rate for fixation of displaced intraarticular calcaneus fractures.