

Acute Subtalar Arthrodesis for Sanders Type IV Calcaneus Fracture

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Background

Displaced intra-articular calcaneus fractures are a challenging injury pattern. Symptomatic subtalar arthritis develops in many patients who sustain a displaced intra-articular calcaneal fracture; these patients then require subtalar fusion. Primary subtalar arthrodesis has become an increasingly popular treatment option for the management of Sanders type VI calcaneus fractures.

Purpose

This video provides an overview and case presentation and demonstrates management of a Sanders type VI calcaneus fracture with subtalar arthrodesis.

Methods

The anatomy of, diagnosis of, and treatment options for calcaneus fractures are reviewed. The case presentation of a 24-year-old man with a right open calcaneus fracture is reviewed. After a thorough discussion of the risks, advantages, and prognosis, the patient elected to proceed with primary subtalar arthrodesis.

Results

An extensile lateral approach in combination with a medial approach was used. Subtalar fusion was performed using a combination of cannulated screws and a mesh plate. The patient remained non-weight bearing for 3 months postoperatively. A CT scan obtained 3 months postoperatively showed successful subtalar arthrodesis.

Conclusion

Primary subtalar arthrodesis is a viable surgical treatment option for the management of Sanders type IV calcaneus fractures and obviates the need for secondary surgery if subtalar arthritis occurs after open reduction and internal fixation.