

NEGLECTED AVULSION FRACTURE OF CALCANEAL TUBEROSITY : IT'S NEVER TOO LATE TO FIX A FRACTURE !

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Introduction: Avulsion fractures of the calcaneal tuberosity are rare infrequent injuries. Recent studies on the epidemiology have demonstrated that they account for 1.3% to 2.7% of all calcaneal fractures. Beavis et al classified calcaneal avulsion fractures into 3 types. Type I is a "sleeve" fracture, Type II is the "beak" fracture, Type III is an infrabursal avulsed fracture. Numerous fixation options have been described, including the use of Steinmann pins and cerclage wires, tension-band wires, sole lag screws, lag screws combined with plates and a variety of suture anchor fixation.

Discussion: A 22-year-old male who was involved in a road traffic accident, sustained avulsion fracture of the left calcaneal tuberosity but only sought medical attention about 8 weeks post injury. He was referred to our centre due to persistent posterior ankle pain and deformity. On examination, there was a prominent painful swelling at posterior left ankle with equinus deformity. Standard ankle radiographs revealed a Type I avulsion fracture of the left calcaneal tuberosity. We proceeded with open reduction and screw fixation of the left calcaneum with Achilles tendon hemi-section. Direct posterior midline skin incision was used to approach the fracture site. Locking suture was applied to the Achilles tendon proximal to the avulsed fragment and used to pull the fragment down to its original position. Two cancellous screws (6.5mm) was inserted to hold the reduction. Achilles tendon hemi-section was then performed and wound closed in layers. A dorsal plaster slab was initially applied and converted to full cast after wound inspection, in ankle plantarflexion 15 degrees. Patient was discharged home on day 4 post operation

Conclusion: The widely accepted treatment option for type I and type II fractures has been the use of lag screw fixation. On the background of a neglected fracture, treatment strategy remains the same, albeit with more difficulties.