Paediatric Intraarticular Calcaneal Fracture: A Non-Operative Experience

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INTRODUCTION:

Calcaneal fracture is rare in paediatric age group with incidence of 0.41 per 10000 children. This case report presents a 9 years old boy with a right calcaneal fracture with subtalar intra-articular involvement and discusses the mode and result of treatment.

REPORT:

A 9 years old boy presented post traumatically with pain and swelling over right heel. The child had two concurrent medium energy traumas over his right foot from bicycle and scooter accidents. On examination, there was swelling with tenderness over the right heel region and minimal plantar ecchymoses.

Radiography of right calcaneum showed an fracture of calcaneal body with Bohler angle of 35° and Gissane angle of 135°. Computed tomography showed fracture of right calcaneal body with intra-articular extension into the subtalar joint. The fracture lines are considered a Type I fracture under Sanders classification.

The child was prescribed with crutches of appropriate height and fiberglass bootcast. After 6 weeks of immobilization, repeated radiograph showed that the right calcaneum fracture has consolidated adequate calluses. He was able to bear weight and ambulate without pain. The medial longitudinal arch was not compromised and there was no clinical deformity.

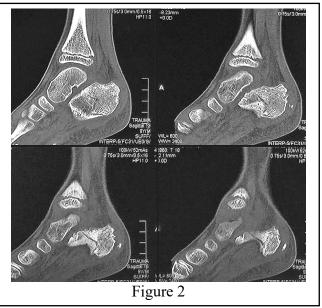
Figure 1: Photograph of plantar aspect over right foot shows central ecchymosis at midfoot (Mondor's sign).



Figure 1

Figure 2: CT scan of right calcaneum (sagittal and coronal view) shows fracture of calcaneal body with intra-articular extension into the subtalar joint.

CONCLUSION:



This case report has demonstrated that conservative treatment for minimally displaced calcaneal fracture with subtalar intra-articular involvement in paediatric age can achieve optimal results in terms of bone anatomy, patient's activity and physical performance.

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