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IMAGES IN EMERGENCY MEDICINE

Calcaneal fracture with ipsilateral bi-malleolar and fourth and fifth metatarsal fractures

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Figure 1 Radiographs showing calcaneal, ankle and metatarsal fractures.

Calcaneal fracture is the most common fractured tarsal bone. The mechanism of injury is axial loading in which the talus is driven into the calcaneus, or a twisting injury. Over

20% of these patients suffer associated injuries of the spine, pelvis or hip.

A 39-year-old man presented to the emergency department with a history of chip board sheets falling onto his

lower leg. The heel was flattened with bruising of the sole. Radiographs of the ankle revealed an intra-articular fracture of the calcaneus with a bi-malleolar fracture of the same foot. Radiographs of the foot taken afterwards revealed fractures of the fourth and fifth metatarsals (fig 1).

This is a very rare combination of foot and ankle injury and we stress the need to inspect and palpate other areas at high risk for fracture, such as the medial, lateral and posterior malleoli, as well as the base of the fifth metatarsal. We also reiterate the significance of Ottawa decision rules for requesting ankle and midfoot radiographs.¹

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