

Exam Date: 06/18/2005

CT OF THE LEFT ANKLE AND DISTAL CALF: 06/18/2005

COMPARISON: Two views of the left tibia and fibula 06/18/05.

CLINICAL DATA: A 22 year old man status post 8 foot fall with open left tibial/fibular fractures.

TECHNIQUE: Helical CT with 1.25 mm collimation was performed from the mid diaphyses of the left tibia and fibula through the inferior aspect of the talus, without administration of intravenous contrast. Sagittal and coronal reformats were then constructed from these data.

FINDINGS: A severely comminuted, complex fracture of the distal left tibia is seen. The fracture consists of multiple bony fragments, several of which are markedly displaced and angulated. The fracture extends into the tibial plafond and into the articular surface, with multiple small bony fragments seen within the ankle joint space itself. The sagittal reformatted images demonstrate that the fracture involves the posterior malleolus, with 8 mm of separation between a larger posterior malleolar fragment and the main tibial shaft. There is marked widening of the superolateral aspect of the ankle mortise, best seen on the coronal reformats. A fracture through the distal diaphysis of the left fibula is also present, with marked valgus angulation of the distal fragment.

There is distortion of the normal tibiofibular distance, with widening proximally and severe narrowing distally, suggesting injury to the syndesmosis and intraosseous membrane. A left ankle joint effusion is observed.

A small bony fragment is seen at the posterior aspect of the navicular bone. This may represent an ossicle or an avulsion fracture of the proximal navicular, with dorsal angulation of the small fracture fragment.

There is marked stranding seen within the soft tissue of the distal calf, consistent with hematoma and/or edema.

IMPRESSION:

1. Severe, complex comminuted fracture of the distal tibia with extension into the ankle joint and multiple small bony fragments seen within the ankle joint. Marked widening of the superolateral aspect of the ankle mortise. Left ankle joint effusion.
2. Fracture through the distal diaphysis of the left fibula with marked valgus angulation of the distal fragment. Small bony fragment at proximal superior aspect of the navicular, which may represent an ossicle or avulsion fracture.