

Proximal avulsion rupture of the flexor digitorum longus tendon associated with a medial malleolus ankle fracture

Naoki Yoshida, Yoshihiko Tsuchida

Department of Orthopedic Trauma Surgery, Shonan Kamakura General Hospital, Kanagawa, Japan

Correspondence to

Dr Naoki Yoshida,
n_yoshida@shonankamakura.or.jp

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DESCRIPTION

A 37-year-old man presented to the emergency department with right lower limb pain after being hit by an excavator. His right ankle was swollen, but no open wounds were observed. Radiography and CT of the right ankle revealed a medial malleolus ankle fracture (figure 1A,B).

During his treatment with osteosynthesis, a proximal avulsion rupture of the flexor digitorum longus (FDL) tendon from the musculotendinous attachment was discovered (figure 2). The flexor hallucis longus (FHL) tendon and posterior tibial neurovascular bundle were intact. The ruptured FDL tendon was interlaced through the FHL tendon and immobilised in a below-knee cast for 6 weeks. He showed a good functional outcome and had returned to work at the 5-month follow-up.

Proximal avulsion rupture of the FDL tendon associated with an ankle fracture is extremely rare.¹ The mechanism of this injury is postulated to be that the valgus/adduction and external rotation forces at the ankle would cause maximal tensile force within the FDL tendon, causing it to avulse at the musculotendinous junction.² When this occurs, ligamentous repair is recommended.³ In the context of an ankle fracture caused by atypical direct force, it is imperative to consider the possibility of avulsion rupture of the FDL tendon.

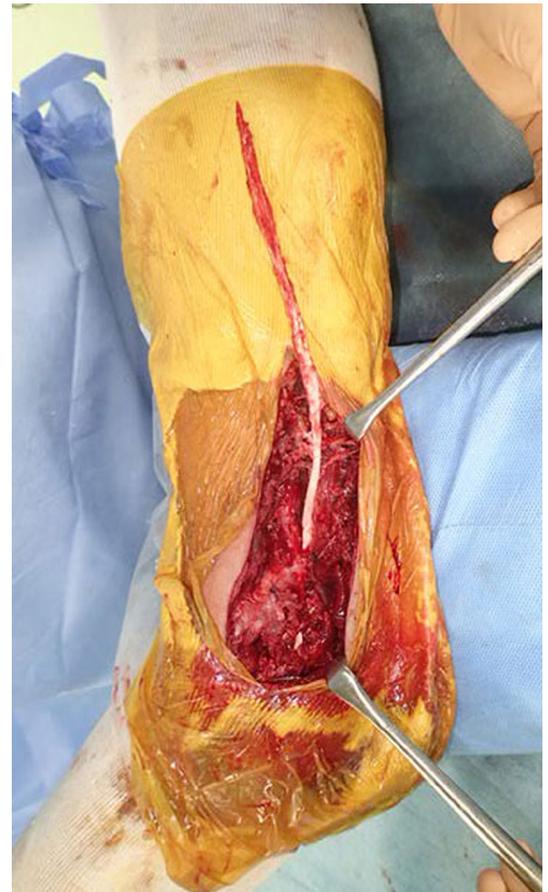


Figure 2 During osteosynthesis, a proximal avulsion rupture of the flexor digitorum longus tendon from the musculotendinous attachment was discovered.



Figure 1 (A) Radiograph revealing a medial malleolus ankle fracture. (B) CT scan revealing a medial malleolus ankle fracture.

Learning points

- ▶ Proximal avulsion rupture of the flexor digitorum longus (FDL) tendon associated with an ankle fracture is extremely rare.
- ▶ It is important to consider a possible proximal avulsion rupture of the FDL tendon while examining and treating an atypical ankle fracture.

Contributors The patient's care was overseen by NY and YT. YT provided assistance with the drafting of the manuscript. Both authors approved the manuscript prior to submission.

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