

Unraveling the Enigma: Understanding of Lateral Subtalar Dislocation

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INTRODUCTION:

Subtalar dislocation, a rare injury that accounts for less than 1% of all dislocations, involves the simultaneous disruption of the talocalcaneal and talonavicular joints. These injuries are broadly classified into medial and lateral subtalar dislocation. We present an uncommon and infrequently reported occurrence of closed lateral subtalar dislocation and its management.

REPORT:

A 32-year-old male suffered severe pain and deformity over his right ankle following a road traffic accident. His foot was in eversion and pronation without any open wound. Radiographically, it shows right lateral subtalar dislocation with malunited distal tibia and lateral malleolus. Multiple attempts of closed manipulative reduction were in vain, even with sedation and adequate analgesia. Open reduction via medial approach shows that the talar head slips under the posterior tibialis and flexor digitorum longus tendon, preventing the reduction. The joint reduction was achieved upon lifting the obstructed tendon. Transfixing kwire 2.5mm was used to stabilize the subtalar and tibiotalar joints. Three months later, he regained his ankle range of motion and could walk without support.

DISCUSSION:

Contrary to medial subtalar dislocation, which is more common, the lateral variant only accounts for 17%-26% of subtalar dislocation, which is more likely to be open and associated with fractures. As a result of high-energy trauma, the foot is forced into an everted position while in dorsiflexion, causing the talar head to pivot around the anterior process of the calcaneus.

About 60% of lateral subtalar dislocations were irreducible, requiring an open reduction to untangle the entrapment of the talar head around the posterior tibialis tendon or the flexor digitorum longus tendon from blocking the reduction of the talocalcaneal and talonavicular

joint.



Figure 1: Right Lateral subtalar dislocation

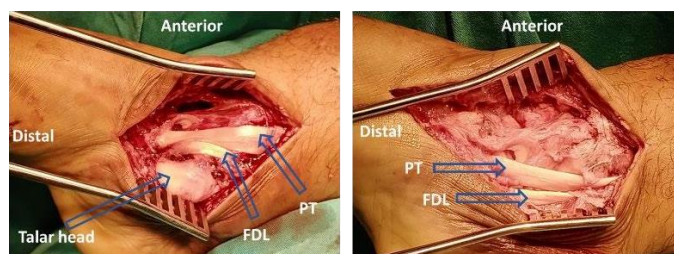


Figure 2: Pre & post reduction

CONCLUSION:

Lateral subtalar dislocation requires an open reduction in an irreducible situation to prevent hindfoot deformity and instability from non-anatomic reduction and inadequate stabilization.

REFERENCES:

1. Sharma S, Patel S, Dhillon MS. Subtalar Dislocations. J Am Acad Orthop Surg Glob Res Rev. 2021 Dec 22;5(12):e21.00295.