

Isolated Talonavicular Joint Dislocation: A Case Report

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INTRODUCTION:

Talonavicular joint dislocation without subtalar joint dislocation or tarsal bones fracture is rare⁵. Mechanism of injury is usually abduction or adduction force to the forefoot. Main and Jowett described this midtarsal joints injury with a classification system to help decide the best course of treatment¹.

CASE PRESENTATION:

A 21 year old man was hit by a car and post trauma, he complained of pain over his left foot and was unable to ambulate. Left lower limb examination revealed a deformed swollen left foot. He also sustained a deep laceration wound over the heel. He was unable to plantarflex his ankle. Neurovascular of left foot remained intact. Radiographs showed talonavicular dislocation with no evidence of tarsal bone fracture. He subsequently underwent closed reduction and percutaneous K wiring of the talonavicular joint of the left foot. Laceration wound over the heel was debrided and sutured accordingly. Post operatively, he was immobilized with back slab and kept non-weight bearing for 6 week and gradually returned to full weight-bearing after 9 weeks. He was back to normal activities after 10 weeks.

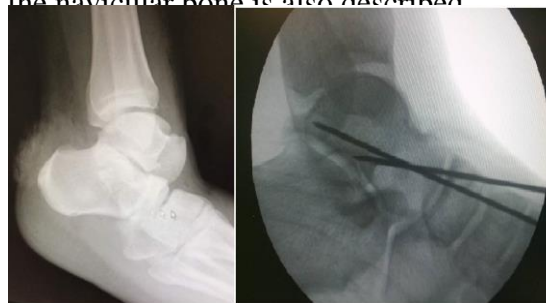
DISCUSSION:

The midtarsal joint includes talonavicular and calcaneocuboid joints.² These joint are less likely to injured because of the strong ligamentous structures around them.² The strongest ligamentous structures lies on the plantar side which is protected by the long and short plantar ligament, bifurcate ligament, and the spring ligament, which supports the arch of the foot.²

Main and Jowett¹ classified midtarsal injuries according to direction of deforming force and displacement into five groups (medial,

longitudinal compression, lateral, plantar, and crush)¹.

Surgical repair of the short plantar ligament, bifurcate ligament and plantar calcaneonavicular or spring ligament is preferred this injury.⁴ Open reduction and internal fixation usually yield better outcome.³ Primary fusion of the talonavicular joint after fracture dislocation of the navicular bone is also described⁴



CONCLUSION:

Isolated talonavicular dislocation is rare. It represents complex plantar ligamentous structures injury.³ It is important to recognize this injury as early diagnosis and management favours good outcome.³ Anatomic reduction and stable fixation can be achieved using closed manual reduction and percutaneous k wiring. Closed reduction was employed in this case to minimize manipulation to the soft tissue.

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