

ATYPICAL PRESENTATION OF LISFRANC FRACTURE DISLOCATION ASSOCIATED WITH HIGH VELOCITY INJURY

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Introduction: Lisfranc complex consists of bony and ligamentous elements which provide structural support to the transverse arch. Injuries often result from rotational forces and axial load through hyperplantar flexed forefoot. These injury are rare and frequently missed. Radiological diagnosis demonstrates disruption between the articulation of the medial cuneiform and base of the second metatarsal bone.

Discussion: A 40 years old gentleman presented to our centre with pain over the left foot after motor vehicle accident. His left foot was stuck below the motor paddle. No open wound was seen. On examination, localised swelling and tenderness over dorsal aspect of the midfoot with limitation of foot and ankle movement. Noted bruises over the plantar aspect of midfoot. Foot compartments was soft and skin was intact. Foot radiograph demonstrated a Lisfranc fracture dislocation and fracture over medial and intermediate cuneiform and fracture over base of second, third, and fourth metatarsals bone with lateral displacement. Immobilisation of the foot using above knee cast for two weeks duration to reduce foot swelling followed by open reduction and internal fixation using plates and screws. Post operatively, non weight bearing cast was applied for 6 weeks. Partial weight bearing was started then followed by full weight bearing. After 3 months, normal physical activity resumed. He had only mild pain with full weight-bearing at 6 months. He was pain free at 1 years.

Conclusion: Injuries of the Lisfranc joint are rare and frequently missed upon initial examination. Treatment of choice for more severe cases includes open reduction and internal fixation. We used plates and headless compression screws for the stabilisation of the fracture dislocation. Surgery was delayed to allow for reduction in tissue oedema and avoid post-operative complications. Despite appropriate reduction and fixation, patients may develop post-traumatic arthritis which required arthrodesis later.