

Stairway Slide Gone Wrong: A Rare Paediatric Lisfranc Injury

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INTRODUCTION:

Lisfranc joint complex is a stable joint with little motion due to its stable osseous architecture and ligamentous restraint. Lisfranc in pediatrics is a among surgeon due to lack of research and case report in this particular injury. We report a rare paediatric Lisfranc injury and the outcome following a surgical intervention. Our goal is to contribute to the consensus on managing pediatric Lisfranc injuries in the future.

REPORT:

A 10-year-old boy presented to our center after his left foot got caught in the stairway rails while sliding down, resulting in midfoot pain, swelling, tenderness, and medial plantar ecchymosis. Radiographs of the left foot revealed a fleck sign over the Lisfranc space and a fracture at the base of the first left metatarsal bone (Myerson classification Type B1). We performed closed manipulative reduction and restored Lisfranc instability using 1.6mm Kirschner-wire, which was inserted from the medial cuneiform to the second metatarsal. Another Kirschner-wire was inserted from the base of the first metatarsal bone to the base of the second metatarsal bone. The patient was put on a left below-knee back slab postoperatively. The Kirschner-wires were kept for six weeks, and the back slab was kept for another two weeks. Two months post-trauma, the patient was able to walk unaided with full weight-bearing and had no active complaints. The range of motion over the left ankle and foot was full, with no restrictions in his daily activities (OxAFQ-C 98.3)

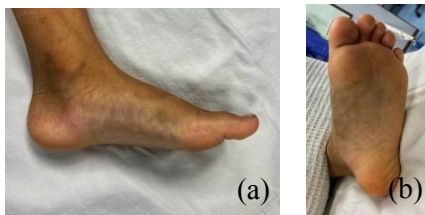


Fig. 1(a) & (b): Clinical pictures of the left foot showing medial plantar ecchymosis



Fig. 2: Pre-operative left foot radiographs show positive Fleck sign and Lisfranc space widening



Fig. 3: Post-operative left foot radiographs

CONCLUSION:

There is ongoing debate regarding the optimal approach for definitive management of Lisfranc injuries in children due to their rarity and lack of available evidence. However, operative treatment may be necessary if there is greater than 2.0mm joint displacement, as this can greatly affect functional outcomes.

REFERENCES:

1. Samuel Paek et al, Treatment of pediatric Lisfranc injuries: A systematic review and introduction of a novel treatment algorithm.
2. G Frank Johnson, Pediatric Lisfranc Injury: "Bunk Bed fracture".