X-Ray Quiz: Ankle Sprain

1. On the PA view, there was dislocation in lisfranc joint and fracture in the third metatars basis (Figure 1, 2).
2. Lisfranc fracture dislocation.
3. ED treatment of emergency reduction. After initial stabilisation, the patient should be referred to an orthopaedic surgeon (Figure 3).

Discussion

Lisfranc fracture dislocations cause severe tarso-metatarsal malalignment (1). The Lisfranc joint is the articulation between the more rigid midfoot and the relatively flexible forefoot. The correct identification and management of disruption of this articulation is essential in optimizing the outcome of these potentially career-ending injuries in athletes (2). Tarsometatarsal injuries are well known for their low inci¬dence (1/55.000 per year and 0.2% of all injuries) but high impact on functional outcome (3). With respect to their treatment, there is no real consensus. Injuries should be treated nonoperatively when nondisplaced. In displaced injuries, treatment options are closed reduction with or without fixation, open reduction with various methods of fixation (Kirschner wires, different types of screws, extra-articular plate fixation, or suture-button device), and primary arthrodesis (3).

References

1. Demirkale I, Tecimel O, Celik I, Kilicarslan K, Ocguder A, Dogan M. The effect of the Tscherne injury pattern on the outcome of operatively treated Lisfranc fracture dislocations. Foot Ankle Surg 2013; 19: 188-93. [CrossRef]
2. Eleftheriou KI, Rosenfeld PF. Lisfranc injury in the athlete: evidence supporting management from sprain to fracturedislocation. Foot Ankle Clin. 2013; 18: 219-36. [CrossRef]
3. Schepers T, Oprel PP, Van Lieshout EM. Influence of approach and implant on reduction accuracy and stability in lisfranc fracture-dislocation at the tarsometatarsal joint. Foot Ankle Int 2013; 34: 705-10. [CrossRef]

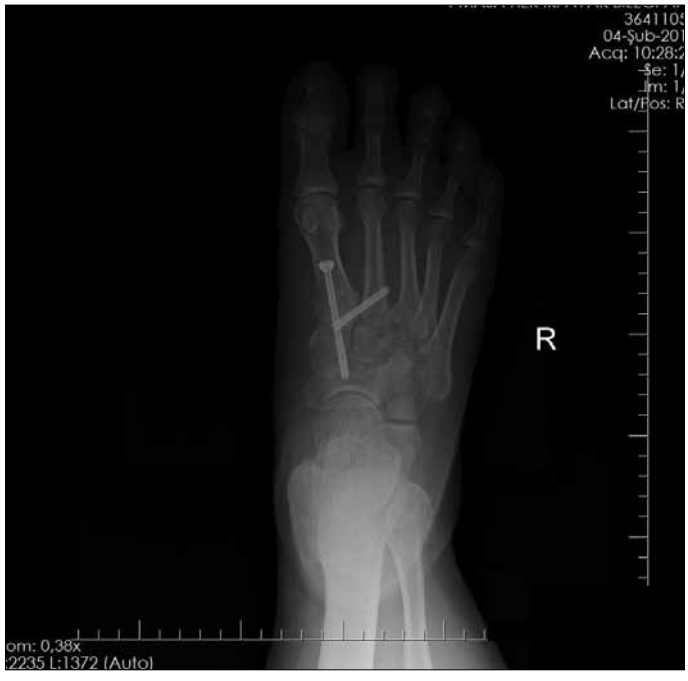

Figure 3. Reduction with screw of foot

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