

## **A CASE REPORT ON MANGLED FOOT WITH OPEN LISFRANC INJURY TREATED WITH ILIZAROV EXTERNAL FIXATOR**

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**Introduction:** Lisfranc injury either bony and soft tissue is not uncommon and can be treated with open reduction and internal fixation. The goals of treatment are realignment of the medial and lateral columns of the foot and restoration of joint congruity. Nevertheless, all of the common methods of internal fixation can result in disastrous outcomes in poor soft tissue envelopes and open injuries. This article reports the use of Ilizarov External Fixator in reconstructing open Lisfranc fracture dislocation with good outcome at 1 year follow up.

**Discussion:** We performed a surgery on a 38 years old man, who presented with polyfractures involving closed fractures over the pelvis, humerus, femur as well mangled right foot with open Lisfranc injury. Foot was still viable on temporary spanning external fixator but the soft tissue injury was very massive, thus not allowing further reconstruction with internal implants. We proceeded with External Ilizarov Fixator to reconstruct the fracture. Intraoperatively, patient was placed on 2 complete rings over the tibia, proximal to fracture site and spanned across the ankle with foot plate and dorsal foot frame. All fragments were held by multiple tensioned olive wires mimicking the direction of Lisfranc ligaments. This construct allowed stable fixation with early weight bearing and stable wound base for soft tissue healing. The frame was removed at 4 months post op with maintenance of foot column. Patient able to walk with minimal pain on exertion and free of infection.

**Conclusion:** Versatility of Ilizarov External Fixator can be considered as an alternative technique in complex foot trauma surgeries with potential advantages of early weight bearing and no retention of implant.