

## **BONE TRANSPORT OVER LOCKING COMPRESSION PLATE FOR A CASE OF FEMUR NON-UNION**

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**Introduction:** Bone transport of a femur using Ilizarov external fixator (IEF) guided by an intramedullary device has better control of length and alignment during the transport, and facilitate early removal of frame. Shorter duration of IEF reduces the risk of pin tract infection and improves patient's compliance to treatment. We report a case of a 36-year old man with a non-union of his left femur and preexisting locking compression plate (LCP). An IEF was applied around the LCP and corticotomy was performed for transport. Bone docking was achieved at 8 weeks with good evidence of bone regenerate.

**Discussion:** We present a 36-year old man with non-union of his left femur. The initial fracture was fixed with an LCP however there was no evidence of radiological union with a large defect 4 months post-operatively. We applied an IEF onto his left femur, performed corticotomy, and removed two locking screws of the transport segment. We began the transport process and docking was achieved at 8 weeks with good amount of bone regenerate. He was able to walk supported with axillary crutches during the transport process. This report will discuss on the challenges using Ilizarov external fixator in a preexisting LCP to manage large area of bone defect, ability to weight bear during bone transport, and early removal of external fixator.

**Conclusion:** Bone transport over an LCP is technically demanding but it preserves bone length and soft tissue envelope, allows controlled segment transport, and facilitate early frame removal during consolidation phase.