

# **Management Of Long Bone Fracture With Massive Bone Loss And Infection Using Mono-Axial Fixator System And Illizarov**

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## **INTRODUCTION**

This case report discusses the experience encountered by the orthopaedic surgeon and his team in addressing the massive skeletal defects and its superadded infections until bone union was achieved.

## **CASE PRESENTATION**

A 55 year old male was brought to the Emergency Department after a Road Traffic Accident. Patient sustained a Gustillo III B Segmented Femur with Massive bone loss and a Gustillo II Tibia fracture on the same side. The femoral defect was approximately 10 cm. Patient went through multiple surgeries involving Bone transport of femur, distraction Osteogenesis using a Monoaxial External Fixator resulting in malalignment that was eventually corrected with a long locking plate. Primary union at docking site and distraction callus was achieved.

The tibia was initially reduced with an Interlocking Nail but due to Chronic Osteomyelitis, the implant failed and subsequently removed debrided and an Illizarov External Fixator was applied. Union was achieved.

## **DISCUSSION**

The management of this case was directed to correct the deformities and achieve equal length of both limbs and to restore the normal functions. Infections are one of the most important and fearsome complication following fracture treatment. This can involve different areas i.e. hardware, bone and soft tissues.

## **CONCLUSION**

The use of Illizarov and Monorail (Monoaxial External Fixator) has proved to be a minimally invasive and reliable method in managing massive bone defects and infections.