

## Infected Nonunion Of Tibia Treated With Ilizarov Method

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### OBJECTIVE:

Infected nonunion of tibia is a chronic and debilitating condition. The Aim of this study was to evaluate the effectiveness of the Ilizarov method to eradicate the infection and restore bone union and functionality in cases with infected nonunion of the tibia.

### MATERIAL AND METHODS:

We prospectively reviewed 32 patients from August 2013 to December 2016, with infected nonunion of tibia treated previously with interlocking nail, plate or external fixator. Our study included 26 males and 6 females All patients treated with removal of implant, radical debridement and application of Ilizarov followed by bone transport. The mean length of the bone defects after radical debridement was 8.4 cm (range 4–16 cm). Bone transportation done at a rate of 1 mm/day followed auto iliac bone graft at docking site. After consolidation of bone at distraction site and docking site removal of ring done and PTB cast applied which was removed after 6 weeks.

### RESULTS:

Ilizarov fixator was kept for an average of 190 days. The mean follow-up after removal of the apparatus was 16 months (4–28 months). All the patients achieved bone union, and no recurrence of infection was observed. Pin site tract infection present in 6 cases and ankle stiffness in 4 cases The time of bone transport took a mean of 90 days (range 40 to 160 days). According to Association for the Study and Application of the Method of Ilizarov (ASAMI) classification, bone results were excellent in 78, good in 12, fair in 10; functional results were excellent in 57, good in 22, fair in 21, and no poor.

### DISCUSSION:

Non-union of long bones with associated deformity, persistent infection, loss of bone and soft tissue contracture has always been a challenge to orthopaedic surgeons. Ilizarov method can solve all problem of infected nonunion of tibia

### CONCLUSIONS:

Our study suggested that Ilizarov methods in the treatment of infected nonunion of tibia provide satisfied results. Pin site tract infection and ankle stiffness is major complication.

### REFERENCE:

1. [Megas P](#), Injury.2010 Mar;41(3):294-9
2. [Peng Yin](#) Journal of Orthopaedic Surgery and Research April 2015**10**:49