

Bone Transport in a Visually Impaired Patient

¹M H Vajira Siri; ²Ashraf HAH; ³Kamarul AAG; ⁴Nazari AT; ⁵Ruben JK; ⁶Haris A
^{1,2} Orthopaedic department, Hospital Pengajar Universiti Putra Malaysia, Serdang, Malaysia
³ Orthopaedic department, Hospital Tengku Ampuan Rahimah, Klang, Malaysia
⁴ Orthopaedic department, Sarawak General Hospital, Kuching, Malaysia
^{5,6} Orthopaedic Department, Hospital Serdang, Malaysia.

INTRODUCTION:

Infected non-unions of tibia with bone loss are a significant challenge for surgeons. Ilizarov's procedure is a common form of treatment in such patients. Here we report our management for a visually impaired patient with massive bone loss.

REPORT:

A 47-year-old male with visual impairment due to diabetic retinopathy presented to us after sustaining open segmental left tibia fracture treated with wound debridement and external fixation a year ago. He had multiple sinuses over left leg and underwent sinusectomy, bone resection and antibiotic cement spacer insertion with external fixator. Gradual bone transport using the conventional nut turning method will be difficult in this patient. Thus, we decided to proceed with acute tibialization of fibula.

CONCLUSION:

In patient with visual impairment, tibialization of fibula is a good alternative treatment of infected nonunion with bone loss with the only requirement being the availability of an appropriate length and width of ipsilateral fibula.¹ The incorporation of the fibula into the tibia does not require creeping substitution and has all the advantages of vascularized fibular graft without the need for micro vascular expertise.²

REFERENCES:

1. O. C. Nwokike, E. E. Esezobor, D. O. Olomu, E. O. Edomwonyi, J. E. Onuminya (2015) Tibialization of Fibula in Treatment of Major Bone Gap Defect of the Tibia: A Case Report. Open Journal of Orthopedics,05,240-244.
2. El-Sayed M, El-Hadidi M, El-Adl W. Free non-vascularised fibular graft for treatment of post-traumatic bone defects. Acta Orthop Belg. 2007 Feb;73(1):70-6. PMID: 17441661.

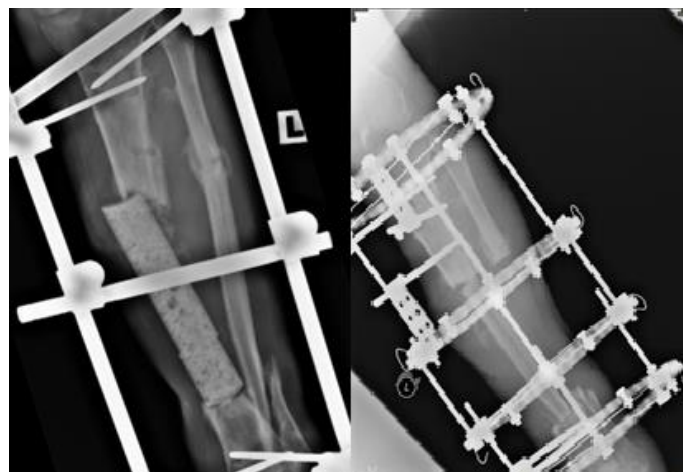


Figure 1: Plain radiograph of left tibia pre and post tibialization of fibula

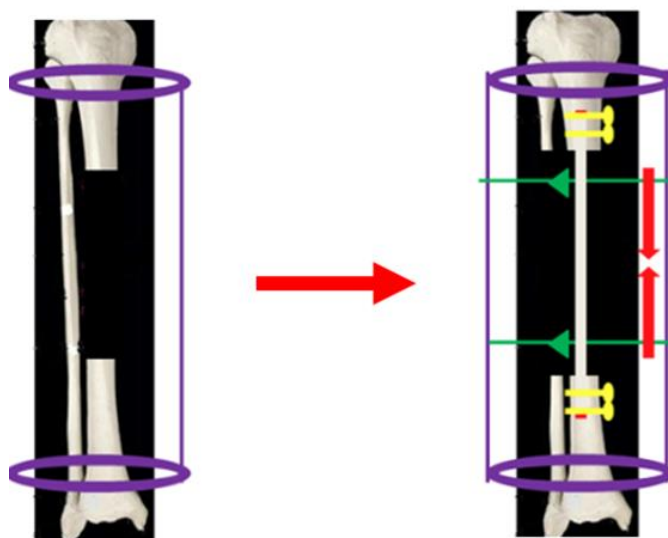


Figure 2: Schematic diagram showing detached fibula with soft tissue envelope centralized via olive wires between the gap of tibia