

BIFOCAL BONE TRANSPORT: DISTRICT HOSPITAL EXPERIENCE IN MANAGING LONG SEGMENT TIBIA BONE DEFECT

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Introduction: Severe comminuted fracture of tibia with bone loss, complicated with bone and soft tissue infection in trauma had given reconstructive challenge to orthopaedic surgeon.

Discussion: 39 years old gentleman came to our centre post motorvehicle accident. The initial wound was severe with 2/3 of the tibia bone exposed with periosteal stripping and contamination (Tscherne II). This patient done multiple operation for tibia and fibula (Gustilo IIIB), with no muscle flap done and part of non viable bone need to be resected. The tibia bone gap measured was 7cm and ilizarov limb lengthening system using 2 transporter each one from proximal and distal part done on him. Eventually after 40 days of transport, the bone achieved docking and bone united after 10 months post operative. Patient successfully achieved full weight bearing with shortening about 1 cm and able to resume his work as factory worker.

Conclusion: The use of bone transport technique using Ilizarov external rings has proved to be a reliable method in managing massive bone defects. However even in district hospital, with minimal exposure of severe bone defect cases, our centre able to delivered the best result to this patient. Bifocal bone transport was effective procedure and decreased the time of bone transport. The placement of fixator was less as compared with unifocal bone transport in large defect.