Combined Ortho-surgical approach based on Ilizarov external fixator during management of a severely injured leg (Gustilo type III B fracture tibia): a case report

Chowdhury Foyzur Rob,¹ Md. Abdul Gani Ahsan,² Dr. Col Saiful,³ Md. Gulam Mustofa,⁴ Dr Akhlas Bhuiyan,⁵ Tanvir Ahmed,⁶ Habibur Rahman Chowdhury,⁷ Sahel Ahmed Khan⁸

- 1. Senior Consultant, Department of Orthopaedics, Al-Haramin Hospital Pvt. Ltd., Sylhet, Bangladesh
- 2. Professor & Head, Department of Orthopaedics, Bangabandhu Sheikh Mujib Medical College, Faridpur. Bangladesh
- 3. Assistant Professor, Department of Orthopaedics, President Abdul Hamid Medical College, Kisoregonj, Bangladesh
- 4. Student of MS in Orthopaedics Course, Sylhet MAG Osmani Medical College, Bangladesh
- 5. Senior Medical Officer, Department of Orthopaedics, AlHaramain Hospital Pvt. Ltd., Bangladesh

Correspondence: Dr. Chowdhury Foyzur Rob, Senior Consultant, Department of Orthopedics, Al-Haramine Hospital, Sylhet, Bangladesh, Tel +8801715-250800, email: <u>foyzurrob@gmail.com</u>

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Abstract

We present the case of a patient who suffered an open fracture of tibial shaft (Gustilo type III fracture tibia). He was a 68 years old male sustained a trauma over right leg following motor vehicle accident (MVA) and was presented at our hospital within 3 hours of injury. Initially through debridement and surgical toileting were done and bone was stabilized by uniaxial External Fixator (Ex-Fix). On 2nd and 5th post-operative day (POD) further debridement was performed. On 12th POD posterior tibial artery (right) perforator based fascio-cutaneous flap was done under epidural anaesthesia and rest of the wound covered by partial thickness skin grafting (PTSG). After 7 weeks of trauma and flap covering surgery the Ilizarov osteosynthetic device was applied. Outcome was excellent according to ASAMI criterion. It may be concluded that Ilizarov osteosynthesis device with soft tissue coverage is a unique and definitive technique in the management of complex tibial fracture.