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PRIMARY WOUND CARE AND EXTERNAL SKELETAL FIXATION IN SURGICAL TREATMENT OF OPEN TIBIAL FRACTURES

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Open tibial fractures are the most severe orthopaedic injuries. The lower leg is often injured due to its position in the locomotor system. The injuries of the lower leg skin and soft tissues, bone comminution and threatening infections make the treatment of these fractures particularly complex. The management of open tibial fractures is potentially associated with numerous complications.

The data on treatment outcomes of 36 patients operatively treated for the open tibial fractures in Clinic for Orthopaedic surgery and traumatology, Clinical Center Nis in Serbia during the period from January 1, 2012 to June 31, 2014 were retrospectively analyzed and compared. In all the patients, after thorough wound rinsing, removal of the foreign bodies, debridement and delayed wound closure, fractured bone segments were repositioned and stabilized using external fixator.

In 28 (77.78%) patients fractures healed without major complications, while in 8 (22.22%) major complications occurred, including tibial osteomyelitis in 3 (8.33%) and fracture malunion in 5 (13.88%) patients.

Primary wound care, external fixation, antibiotic and antitetanus prophylaxis are crucial in treatment of open tibial fracture.

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