

RETROSPECTIVE AND PROSPECTIVE OUTCOME ANALYSIS OF SEGMENTAL FRACTURES OF TIBIA

ABSTRACT

Background:

A segmental fracture of the tibial shaft is a major cause of morbidity and mortality in patients with lower extremity injuries. Aim of the study was to evaluate the Functional and Radiological outcome following open / closed reamed interlocking intramedullary nailing for segmental fractures of tibia

Methods:

From July 2015 to September 2017, Twenty one patients (18 males and 3 females) with segmental tibial fractures were recruited from Emergency and outpatient department and functional outcome of these fractures were evaluated after interlocking nailing for tibia. In follow-up, we determined the time to union, delayed and nonunion and overall complication rates and functional outcome by Knee Society Score and Johner and Wruch's criteria. All patients were followed for eighteen months.

Results:

Majority of the patients had a union in 19 weeks to 28 weeks. 16 (76%) patients had excellent outcome, 2 (9%) patients had good outcome, 2 (9%) patients fair outcome and 1(4.5%) patient had poor outcome which was evaluated by knee society score. 4.8 % (1/21) of our patients was labeled as nonunion and was treated by bone graft and dynamization. Insignificant limb shortening of less than 1.5 cm was found in 50% of the study group.

Conclusion:

Majority of the segmental tibial fractures had severe soft tissue injuries and demanded prolonged treatment and with an uncertain clinical and functional outcome.

Keywords: Segmental tibia fracture, intramedullary interlocking nail, Reaming, Nonunion