

Distal Tibia Fracture Treated With Locking Plate: 3 Years Single Center Review

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INTRODUCTION:

Distal tibia fractures are known for their complexity and combined with limited soft tissue and poor vascularity in the area they often present a challenge for the orthopaedic surgeon. Hence, it is also prone to complications and requires careful management. The aim of this study was to evaluate the complication and functional outcome following open reduction and internal fixation (ORIF) with locking plates in patients with distal tibia fractures.

METHODS:

A retrospective study was conducted on patients with distal tibia fracture operated by using locking plate between year 2014 and 2016 in Serdang Hospital. Data regarding age, follow up time, duration of hospital stay, open or closed fracture, time to union, return to work, infection and complication due to the surgery were analyzed. Radiographic examinations were taken to assess the bony union. Clinical outcome was assessed using American Orthopedic Foot and Ankle Score (AOFAS).

RESULTS:

A total of 21 patients with distal tibia fracture managed surgically via locking plate. The mean age was 28-year-old (range, 18-43 years) followed up for a mean of 11 months. 67% (14) of them sustained closed fracture and 33% (7) of them sustained open fracture. The mean length of hospital stay was 8 days. The mean time to union was 8.7 months. 90% (19) patients were able to return to work. There were 14% (3) patients treated via anteromedial approach complicated with surgical site infection and successfully treated with intravenous antibiotic. The mean AOFAS score was 83.78.

DISCUSSIONS:

The optimal treatment for distal tibial fractures remains controversial with high rates of

infection, wound healing complications and post-traumatic arthritis. The aim of all the treatment is to provide strong and stable fixation, while reducing complications to a minimum. There were 14% (3) patients reported complicated with surgical site infection. All our patients who treated with locking plate had comparable good outcome with literature with the mean AOFAS score of 83.78.

CONCLUSION:

Distal tibia fractures remain challenging for orthopaedic surgeons with several potential problems during treatment. However, distal tibia fracture treated with locking plate resulting in good functional outcome.

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