

البحث الرابع: بحث مشترك مقبول للنشر

عنوان البحث: Minimal Invasive Plate Osteosynthesis in Closed Distal Tibial Fracture

الملخص الانجليزى:

Unstable fractures of the distal tibia can present a management dilemma. Traditional operative treatment of such injuries is associated with a high incidence of complications. Minimal invasive plate osteosynthesis (MIPO) involves minimal soft tissue dissection with preservation of the vascular integrity and haematoma of the fracture as well as adequate stabilization of the fracture. In this series we had evaluated the outcome of MIPO technique for such fractures.

Twenty patients (fourteen men and six women) were operated for closed distal tibial fractures (with or without intra-articular extension) by MIPO technique. The mean age was 36.25 years (range, 20-55 years). If an associated fibular fracture was in need for fixation, it was fixed first before tibial fixation. A functional ankle score was assigned using the criteria of Teeny and Wiss.

Two patients were considered dropout from the study. The mean delay to surgery was 8.4 days (range, 5-17 days). The mean operative time was 108 min (range, 80-150 min). Fibular osteosynthesis was performed in seven patients. The mean hospital stay was 11.4 days (range, 7-14 days). The mean follow-up period was 12 months (range, 9-20 months). The results were; 38.9% excellent, 27.8% good, 22.2% fair, and 11.1% poor. Mean time of radiological union was 14 weeks (range, 10- 22 weeks). One patient sustained nonunion of the tibia and four patients sustained 5-10⁰ angular deformities. Wound healing was uneventful in 15 patients.

MIPO technique for closed distal tibial fracture has satisfactory clinical, functional and radiological outcome.