
Functional and Radiological Outcomes of Comminuted Epiphysiometaphyseal
Fractures of Proximal Tibia Treated with Minimally Invasive Percutaneous Plate
Osteosynthesis

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ABSTRACT

Functional and Radiological Outcomes of Comminuted Epiphysiometaphyseal Fractures of Proximal Tibia Treated with Minimally Invasive Percutaneous Plate Osteosynthesis

Objective: To study the functional and radiological outcomes of comminuted epiphysiometaphyseal fractures of proximal tibia treated with minimally invasive percutaneous plate osteosynthesis.

Methods: We conducted a prospective study on closed reduction and percutaneous plate fixation in 17 cases of closed and type 1 open fractures of comminuted epiphysiometaphyseal fractures of proximal tibia in SRI DHARMASTHALA MANJUNATHESHWARA COLLEGE OF MEDICAL SCIENCE AND HOSPITAL. The mean age of patients was 41 years with 15 patients being male and 2 patients being female in the study. We included adult patients with type 5 and type 6 Schatzkar's classification for tibial plateau fractures and closed and type 1 open comminuted metaphyseal fractures of proximal tibia. We excluded ipsilateral lower limb fracture, open injuries of grade 2 and above, patients with compartment syndrome on whom fasciotomy was done and patients treated who were managed conservatively. Patients were followed up subsequently at 6 weeks, 3 months, 6 months and 1 year.

Results: The patients were followed up clinically and radiologically. 15 patients had good to excellent results functionally. All the 17 patients had good to excellent results radiologically. One patient with varus collapse with bone union at 6 months. One patient developed knee stiffness. However there were no soft tissue complications noted.

Conclusion: Good functional and radiological results can be obtained by using Minimally Invasive Percutaneous Plate Osteosynthesis technique for selected comminuted epiphysiometaphyseal fractures of proximal tibia whose reduction was found to be acceptable with ligamentotaxis technique.