Tibial Plateau With Proximal Third Diaphyseal Fracture Of The Tibia Helmi H¹, Sharil AR, Kashfullah K

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INTRODUCTION:

The incidence of concomitant tibial plateau fracture with proximal third diaphyseal fracture is uncommon and has limited cases reported in literature. This may be due to the different force mechanics during trauma causing such fracture not to be present together. In cases involving both tibial plateau and diaphyseal fractures, the aim of treatment which encompasses anatomic restoration of the joint line and to achieve rigid fixation allowing for immediate mobilization of the joint. Furthermore, meticulous soft tissue handling, and employment of minimally invasive techniques are ideal.

REPORT:

A 72-year-old male with no known medical illness presented to our center following a road traffic accident (RTA) with closed fracture left tibia plateau (Schatzker II) in combination with diaphyseal tibial fracture. Open reduction and fixation done using long locking plate (LCP). To achieve stable anatomical reduction and restoration of joint line fixation single long LCP system has been used. On the other hand, a long LCP in this case was aim to achieve relative stability of the diaphyseal fracture.

CONCLUSION:

Fixation of the tibial plateau fracture can be achieved with cannulated screws and plate or screws alone however if the injury is involving the diaphysis, it can be treated using nail or plate. Plate fixation compared with intramedullary nailing is associated with a reduced risk of fracture malalignment with no differences in bone union, wound complications, and superficial infection or deep infection.



Figure 1. Preoperative CT scan of the knee

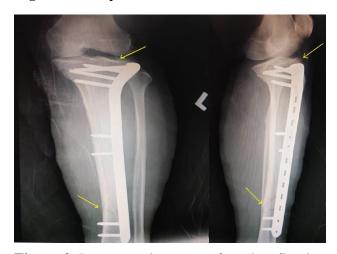


Figure 2. Post operative x-ray after plate fixation

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- 2. 6. Marsh JL, Smith ST, Do TT (1995) External fixation and limited internal fixation for complex fractures of the tibial plateau. J Bone Joint Surg Am 77: 661-673.