

## Anterior Midline Approach in Patella and Tibial Plateau Fracture

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### INTRODUCTION:

Bicondylar tibial plateau fractures with patella fracture are high-energy injuries that are challenging to manage due to the combined complex bony and soft tissue injury. Here are our experience treating this case in our center.

### REPORT:

A 26 year old lady was involved in road traffic accident, sustained pain, swelling over left knee with inability to weight bear. The left knee was swollen and tender with extensor mechanism failure. Radiograph showed transverse fracture of left patella with tibial plateau fracture Schatzker 5. CT revealed comminuted fracture tibial plateau with medial depression more than 4mm.

Anterior midline approach was applied to address the fracture sites. Open reduction, medial and lateral proximal left tibia locked plating was done and cannulated screw fixation of left patella was done with 4mm half threaded screw under image intensifier was done. Post operatively, patient was subjected to early non weight bearing crutches ambulation and limb physio as tolerated. Currently, patient still under follow up.

Managing bicondylar tibial plateau fracture with concomitant patella fracture requires open reduction and internal fixation aiming to get anatomical congruency of articular surface. Meticulous soft tissue handling is important especially around tight space such as proximal tibia to avoid complication such as skin necrosis and infection. Most studies relating different approaches are done in the context of varying fixation strategies, making it difficult to draw definitive conclusions regarding the optimal approach, given the complexity and variability of injuries and surgical fixation. Anterior midline skin incision not only give good view of bilateral condyle and

knee joint, same incision also can be used later for total knee replacement if required.



Figure 1: Initial AP and lateral radiograph



Figure 2: Post operative radiograph.

### CONCLUSION:

Anterior midline approach is one of the options to address bicondylar tibial plateau fracture with ipsilateral patella fracture.

### REFERENCES:

- 1.Lee AK, Cooper SA, Collinge C. Bicondylar tibial plateau fractures: a critical analysis review. JBJS reviews. 2018 Feb 1;6(2):e4.