

RIM PLATING USING MODIFIED EXTENDED ANTEROLATERAL APPROACH FOR POSTEROLATERAL TIBIAL PLATEAU FRAGMENT - CASE REPORT.

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Introduction: Posterolateral tibial plateau fragment is common fragment in high energy tibial plateau fracture. The surrounding neurovascular structures make the access to this fragment challenging. There are many approaches being described to gain access to this fragment, namely, posterior approach, posterolateral approach with or without a fibular osteotomy, extended posteromedial approach, and modified extended anterolateral approach.

Discussion: A 34 years old male, had a road traffic accident and complained of left knee pain and swelling. Neurovascular status was intact. Radiographs showed left tibial plateau fracture. CT scan of the knee revealed both condyle involvement with medial, anterolateral and posterolateral main fragments. Intraoperative, the modified extended anterolateral approach was used to gained access to the posterolateral fragment. The approach is an extension from the standard anterolateral approach. The dissection was carried posteriorly along the tibial plateau and deep to the lateral collateral ligament. Submeniscal capsulotomy was done to visualised the fragment. A 2.7mm mini-plate was placed as a rim plate to support the posterolateral fragment. Buttress plates were applied to support both medial and lateral condylar fragments. Postoperatively, knee range of motion and isometric muscle strengthening exercises were commenced in day two postoperatively. Partial weight bearing was allowed after two months, followed by full weight bearing. Patient returned to work five months after surgery.

Conclusion: Access to posterolateral fragment of tibial plateau can be challenging. The modified extended anterolateral approach allows the surgeon to reach the fragment without the need of isolating important neurovascular structures. It is a useful skill to obtain by surgeons treating this condition.