

The 'Hidden Jewel' In Tibial Plateau Fracture

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INTRODUCTION:

Posterolateral corner of tibial plateau fracture is rare. It is reported to be approximately 7 % of all tibia plateau fractures. It is easily missed if tibial plateau fracture is classified according to Schatzker classification especially in Schatzker type 2.

METHODS:

We would like to report a case where a young gentleman alleged motor vehicle accident sustained a tibial plateau fracture, Schatzker type 2. He was planned for only anterolateral proximal tibial locking plate with iliac bone grafting. However, CT scan shows a lateral tibial plateau fracture with involvement of the posterolateral corner. Buttress plating of this fragment was added to the mentioned procedure. The surgical incision was changed from the anterolateral approach to new posterolateral approach without fibula osteotomy in order to fix this fragment.



Figure1. X-ray right knee AP and lateral view (pre-surgery)



Figure2. CT scan right knee axial view

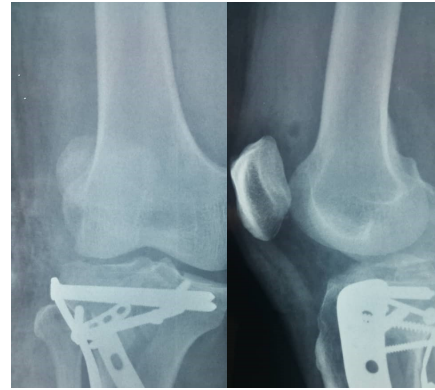


Figure3. X-ray right knee AP and lateral view (post-surgery)

DISCUSSIONS:

Tibial plateau fractures involve articular surface of knee joint, requiring anatomical articular reduction under direct visualisation to prevent long term complications. Schatzker classification does not provide information regarding posterior column of tibial plateau. CT scan provides this information in a 3 dimensional pattern. It is important to diagnose posterolateral corner fracture as it is difficult to approach this fragment from a lateral or anterolateral approach. Biomechanical analysis shows that buttress plating is the strongest fixation in posterolateral tibial plateau fracture. Clear picture of this fracture pattern from CT scan is important as this will change the surgical approach for fixation.

CONCLUSION:

All tibial plateau fractures should have a CT scan done to look for posterior column involvement especially in Schatzker type 2. This will provide more information for better pre-operative planning and definitely will improve operative outcome of tibial plateau fracture.

REFERENCES:

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