

CASE REPORT: DO WE APPROPRIATELY MANAGE HOFFA FRACTURE?

Mohd Azwan Ab Aziz¹, Tengku Muzaffar Tengku Shihabudin¹

¹Universiti Sains Malaysia

Introduction: Hoffa fracture are difficult to appreciate and commonly missed by conventional anteroposterior and lateral radiograph. It can be better appreciated on different cuts of computed tomography (CT) scans or 3D reconstructed images.

Discussion: A 22 years old Malay gentlemen, alleged motor vehicle accident and been diagnosed as open coronal fracture medial condyle of left femur with multiple intracranial bleed. Patient had done wound debridement, arthrotomy washout of left knee & screw fixation of left femur. Patient was discharge well. 3 month later, patient complain of persistent left knee pain & unable to fully straighten of left knee. On further questioning, patient didn't go for left knee physiotherapy. Upon examination, his knee was swollen and present of effusion, open wound healed well. Range of motion of 30 to 60 degree. Distal pulses palpable and good circulation. Plain radiograph of left knee showed displaced coronal fracture medial condyle of left femur with malunion. Noted 2 screws fixation in situ. CT scan of left knee with 3D reconstructed image showed malunion medial condyle of left femur with suprapatella & posterior patella effusion. Patient was placed on supine position with bump under knee joint to keep knee in flexion around 30 degrees. Medial parapatellar approach was use for the exposure of Hoffa fragment. Articular congruency was restored under direct visualization and fixed with lateral plating of medial condyle of left femur, the reduction was confirmed with intraoperative fluoroscopy. The fixation was stable, intraoperative knee able to flex until 100 degree.

Conclusion: In conclusion, we recommend that the lateral position implanted plate is biomechanically the strongest fixation method for Letenneur type I Hoffa fractures. These rare complications of injuries should be identified in time and treated aggressively by early open reduction and anatomic rigid internal fixation in order to achieve good recovery of function.