



JABATAN ORTHOPEDIK  
HOSPITAL SULTANAH NORA ISMAIL  
BATU PAHAT

## TRAUMATIC OSTEOCHONDRAL FRACTURE OF PATELLA

Ahmad Aiman AG, M Zariff A Kadir, Adzuar M, M Hudzairy A  
Orthopaedics Department, Hospital Sultanah Nora Ismail, Batu Pahat, Johor,  
Malaysia.



### INTRODUCTION:

Osteochondral fracture of patella is a fairly common pathology but usually associated with acute patellar dislocations or soft tissue injuries including anterior cruciate ligament rupture. Many of these lesions are initially diagnosed by plain radiographs, however a computed tomography scan or magnetic resonance imaging can add significant value to the diagnosis and treatment.

### CASE STUDY:

A 15 years old boy presented with alleged fall during playing badminton with flexed knee and direct trauma onto the ground. Immediate after the fall, his left knee was pain, gross swollen and unable to straight the left knee.

Upon examination, the left knee was tender and swollen. The knee was not deformed. Patellar tap was positive. The range of motion was limited. The extensor mechanism was intact.

Radiographs of the knee revealed osteochondral fracture with bony fragment displaced medial to the medial femoral condyle.

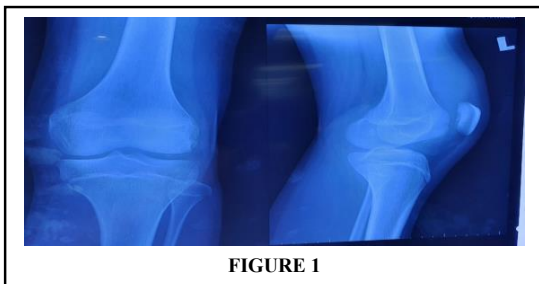


FIGURE 1

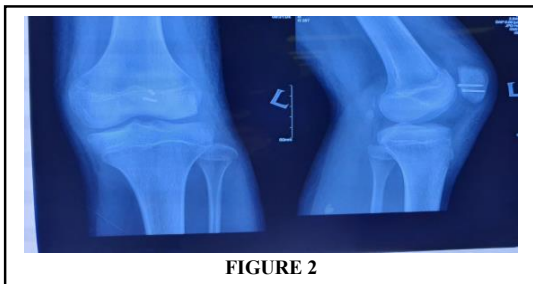


FIGURE 2

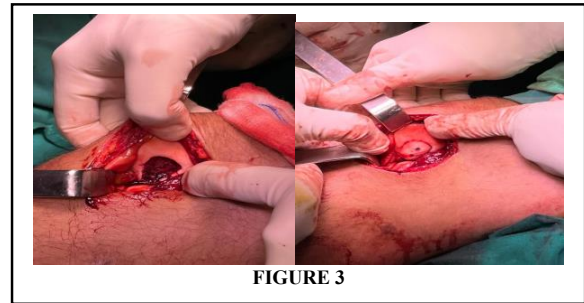


FIGURE 3

**Figure 1: Xray pre fixation**

**Figure 2: Xray post fixation**

**Figure 3: Intraoperative findings**

Then proceed with CT scan of the knee to confirm the diagnosis and determine fracture configuration.

This patient underwent headless compression screw fixation over the patella.

During follow-up, range of motion was full and the patient was return to pre-trauma activities.

### CONCLUSION:

Traumatic osteochondral fracture of the patella diagnosis is challenging as it can be missed on initial radiograph. An advanced imaging such as CT or MRI are essential to confirm the diagnosis and evaluate the fracture configuration and determine the mode of fixation. Early fixation should be emphasized in patients with an osteochondral fracture to get favourable outcomes.

### REFERENCES:

1. Keshkar S et al. Osteochondral fracture of patella. *J Orthop Traumatol Rehabil* (2014);7:91-3
2. Cordonianu, M.A. et al. Treatment of Knee Osteochondral Fractures. *Healthcare* **2022**, *10*, 1061.