

Osteochondral Patella Fracture Mimics ACL Avulsion Fracture

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INTRODUCTION:

Patella fracture makes up about 1% of all adult fractures.¹ This injury may result from direct or indirect trauma.

An indirect force typically may result in transverse fracture of the patella.² while direct mechanism may result in comminution, articular injury, anterior soft tissue damage thus leading to open injury.³ Vertical fracture pattern is possible but rare.⁴

REPORT:

16 years old male was referred to Orthopaedic Clinic with history of fall on right knee complaining of pain and swelling with limited ROM. Clinically the knee was mild swollen with minimal effusion and stable knee. Initial radiologic assessment suspicious of ACL avulsion fracture. Cylinder slab was applied, discharged home and given date for surgical fixation.



Figure 1: Initial radiological image

Patient was scheduled for open reduction and anchor suture fixation, however, intraoperatively it was an isolated displaced articular patella fracture that mimics ACL avulsion fracture on radiograph (based on its location). Articular fracture fragment measuring (25mm x 20mm) x 25mm (depth) was delivered and fixed back with mini-screws and counter sink as it involves patella-femoral compartment articulating surface.

Patient showed good recovery during follow up devoid of arthritic symptoms.



Figure 2: Intra operative findings



Figure 3: 6 weeks post fixation

CONCLUSION:

Isolated articular surface of patella fracture is rare. Hence surgical treatment of anatomical reduction of the articular surface, stable fixation able to withstand the deforming forces acting on the patella is important during the healing process and the preservation of a functional extensor apparatus to start early range of motion. Computed Tomography is helpful in doubtful diagnosis as well as surgical planning.

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