36 year-old female presents with right knee pain.

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Patella fracture
Patella Fracture

- May occur after direct blow to patella, indirect injury, after ACL reconstruction, after total knee prosthesis, or in the setting of pathologic fracture.
- Patients present with pain, swelling, and decreased knee extension strength/tolerance.
- Point tenderness over patella
Patella Fracture

May fracture with the following patterns:

- Transverse (50-60%)
- Stellate (comminuted) (30-35%)
- Longitudinal (12-17%)
- Marginal avulsion
- Osteochondral injury
- Patellar sleeve injury (<16 years old)

Look for associated patella baja or patella alta.
Patella Fracture

• Lateral radiographs will not detect longitudinal or osteochondral fracture.
• Scrutinize AP view and perform sunrise view to identify longitudinal fractures.
• MR needed to evaluate for osteochondral injury and sometimes for patellar sleeve avulsion.
• CT for highly comminuted fractures.
Patella Fracture

Main differentials:
- Bipartite/multipartite patella
- Sinding-Larsen-Johansson syndrome

Surgical Indications:
- >2mm incongruity at articular surface
- >3mm separation of fracture fragments
- Disruption of extensor mechanism
- Open fracture (as with any fracture)
Patella Fracture

Conservative Treatment:

• With any fracture, an open fracture is a surgical emergency.
• Typically: extension splinting (4-6 weeks) and ice.
• Drainage of hemarthrosis for pain relief
• Intraarticular anesthetic for pain
References
