54 y/o male who presents with severe acute onset left knee pain after fall down stairs

Atul Kumar, MD, MS Daniel E. Marrero,





Frontal View L Knee





Lateral View L Knee

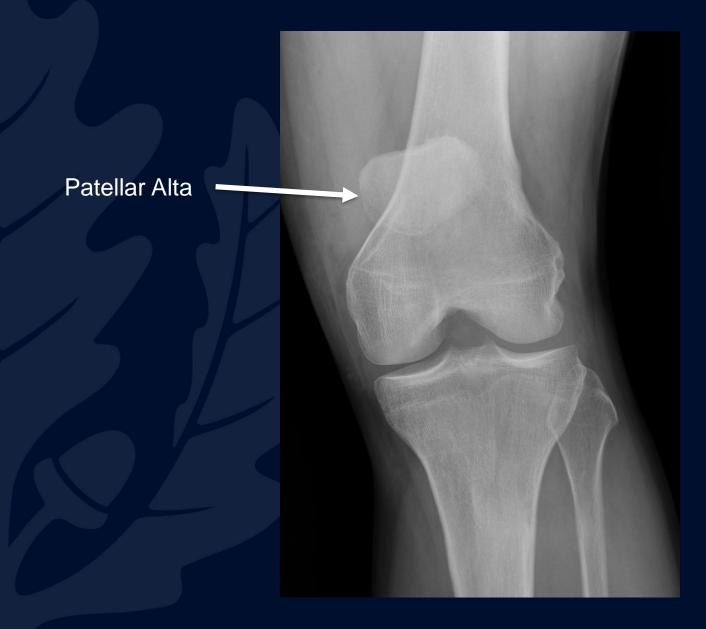






Left Patellar Tendon Rupture





Frontal View L Knee





Insall-Salvati Ratio: 2:1





Patellar Tendon Rupture

- When secondary to trauma, injury is commonly at patellar or tibial insertion
 - Associated with small avulsion fracture
 - More common at superior insertion
- Predisposing factors include
 - Chronic microtrauma/tendinopathy
 - Jumper's knee
 - Sinding-Larsen-Johansson disease (pediatrics)
 - Prior surgery
 - Prior injections



Patellar Tendon Rupture

- When due to systemic disease, mid-tendon injury is more common
 - Such as diabetes, chronic renal disease, or corticosteroid use
- Imaging
 - Radiographs
 - Patellar alta, increased Insall-Salvati ratio
 - Patellar tendon soft tissue swelling
 - Avulsion fracture
 - MRI
 - Variable from partial to complete disruption of patellar tendon
- Insall-Salvati ratio
 - Patellar tendon length:Patellar length
 - Normal from 0.8-1.2



References:

- Bartalena T, Rinaldi MF, De Luca C, Rimondi E. Patellar Tendon Rupture: Radiologic and Ultrasonographic Findings. West J. Emerg. Med. 2010;11:90–91.
- Greis PF, Holmstrom MC, Lahav A. Surgical treatment options for patella tendon rupture, Part I: Acute. Orthopedics. 2005;28:672–679.

