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

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Left Patellar Tendon Rupture
Patellar Alta

Frontal View L Knee
Patellar Alta

Lateral 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:
