• 52F with shoulder pain, limited range of motion
Calcific Tendinitis

- Common, 3% of adults
- Shoulder > hip > elbow > wrist > knee
- Calcific periarthritis
- Osseous involvement is rare
• Retrospective review of 50 cases

• Humerus and femur most commonly involved (each 40%)
  – Also hand/wrist, foot, c-spine, clavicle

• Femur: posterior and subtrochanteric along linea aspera at the level of or within 6 cm of lesser trochanter

• Humerus: proximal – lesser/greater tuberosity; distal – anterior, pec major insertion

Calcific Tendinitis

• Ca hydroxyapatite deposition $\rightarrow$ inflammatory response $\rightarrow$ focal hypervascularility $\rightarrow$ local bone resorption at osseous junction

• Cortical resorption + large mechanical forces $\rightarrow$ osseous changes
Calcific Tendinitis

• Relationship of humeral tuberosity cysts and calcific deposits unclear

• Calcium may deposit into pre-existing cysts
  – Supported by large cysts with small focus of calcification

• Cyst formation is result of intramedullary deposition of calcium
Calcific Tendinitis

- Periosteal reaction from calcium deposition may have aggressive appearance
  - Seen only in diaphyseal involvement
40 y/o woman with abrupt onset shoulder pain, initially diagnosed as brachial neuritis but partial sparing of supraspinatus suggests alternate dx, “intramuscular release of calcification”