History

- 23 year old female with atraumatic pain and swelling of the wrist
- No other past medical history
X-ray
MRI – 1 month later
Acute calcium deposition

- Can be divided into peritendinitis vs periarthritis based on location of Ca++

- Presentation
  - Rare entity in the wrist and hand
  - Acute painful attack with tenderness and swelling and decreased ROM
  - Resolution within weeks
  - Often misdiagnosed with mimics including fracture, infection, CPPD, or inflammatory arthropathy
  - Peritendinitis occurs in older patients (mean 45) vs periarthritis (mean 35)
Acute calcium deposition

- **Imaging**
  - Radiographs and CT
    - Calcification usually diagnostic
    - Most common in flexor carpi ulnaris tendon attachment at pisiform. Second most common is flexor carpi radialis attachment at second metacarpal
  - MRI
    - T1 and T2 hypointense calcification with surrounding edema (GRE helpful)
    - Increased T1 and T2 signal in adjacent tendons with possible tenosynovitis
Acute calcium deposition

- **Treatment**
  - Conservative management +/- steroids
  - Surgical removal
References

- Cowan II, Stone JR. *Painful periarticular calcifications at wrist and elbow; diagnosis and treatment*. J Am Med Assoc. 1952 Jun 7; 149(6):530-4

