Flexor Tenosynovitis

Ryan Keith Weakley
PGY3 USF EM
Class of 2010
Case 1

- 55 YO left handed male presents w/ increased pain to his left index finger for 4 days. Pt states was seen at outside clinic and given Bactrim at that time. On repeat visit, pt was sent to ED for further evaluation. Pt admits to hitting finger while working on his car one week ago. Pt states pain is associated w/ redness, swelling, drainage, and decreased range of motion. Denies fever/chills

- PMH: DM, HTH

- PSH: denies
Case 1 (cont)

- PE: VSS - 99.1F
  - Severe Pain on Passive Extension
  - Finger held slightly flexed
  - Fusiform Swelling (sausage link)
  - TTP along Flexor Sheath

KANAVEL’S SIGN
Case 2

- 55 YO right handed female presents to ED w/ increasing pain to right index finger. Pt states pain is worse over last 2-3 weeks, but has noticed pain intermittently over last 4 months. Pt states pain is associated w/ some increased swelling intermittently and occasionally states it feels as though it gets stuck “bent forward”. Denies any fever, chills, or drainage or recent trauma

- PMH: denies
- PSH: denies
- Social: smokes, etoh, works as a secretary
Case 2 (cont)

- PE: VSS – 98.4F
- TTP on Active Range of Motion
- +Swelling
- - drainage, or TTP on passive range of motion
Goals

- What is this / What is your differential?
- What do you do?
- Learn Kanavel’s Sign?
Etiology

- **Infectious**
  - Staph / Strep – (normal flora)
  - Eikenella – (human bites)
  - Pasteurella – (cat bite)

- **Inflammatory**
  - Acute
  - Chronic (DM, overuse, arthritis)
Pathophysiology

- **Closed Space Infection**
  - Potential to Spread Prox.
  - Potential to Spread/Erode through
    - Fascia
    - Synovial joint spaces
    - Skin
  - Increase Edema/Pressure blocks inflammatory response to fight infection.
Pathophysiology

- **Inflammatory / Overuse**
  - Proliferation of mediators leads to
    - impingement / pain
    - nodularity / fibrosis
    - Trigger finger
What do you do (Infectious)

- Immediate ABX
  - Keflex 2 gram IV
  - Ampicillin/Sulbactam 3 gram IV
  - Cefoxitin 2 gram IV
  - Clinda 900 mg IV + Levaquin 500 mg IV (if PCN allergy)
- Immediate consult to Hand Sx on Call or transfer to facility with hand surgery.
- Splinting in “safe position”
- Elevation
What do you do (infectious)

- For your colleague’s
  - CBC
  - Culture
  - ESR / CRP
  - Plain Film XR (AP + Lat)
What do you Do (inflammatory)

- If suspect overuse syndrome
  - Stop the Modifying Activity
  - Ice / Elevate
  - Oral Steroids (short course)
  - NSAIDs
  - splinting
- Refer for RA work up
Summary

- **Know Kanavel’s Sign**
  - Severe Pain on Passive ROM
  - Fusiform Swelling (sauge link)
  - Finger held in Slightly Flexed position
  - TTP along flexor Tendon

- **Immediate IV ABX and Hand Sx Consult**

- **The pt is going to be admitted. Sometimes, if early, will attempt admit for IV ABx and conservative therapy. This is only to be done in concert w/ a hand sx.**