Wow! That's a Big Finger!

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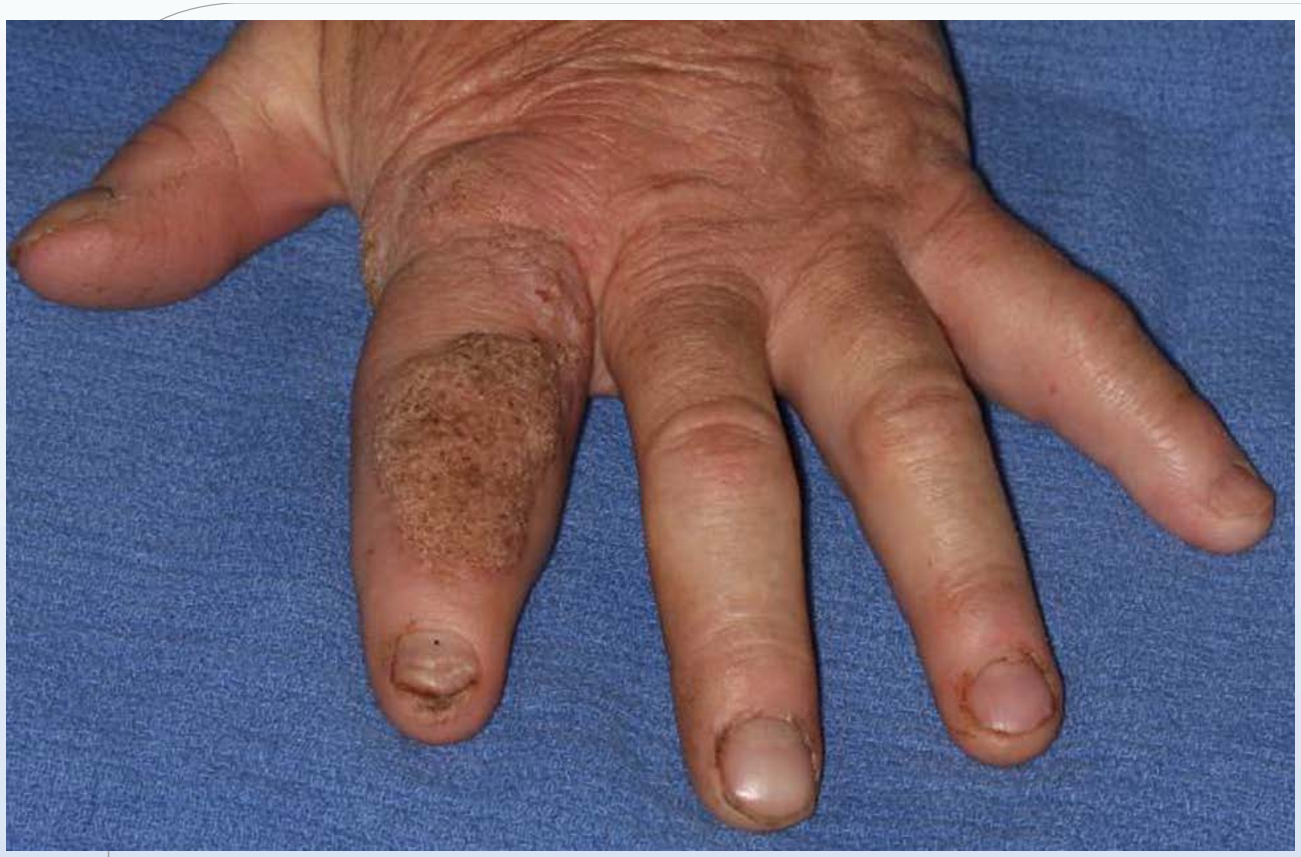
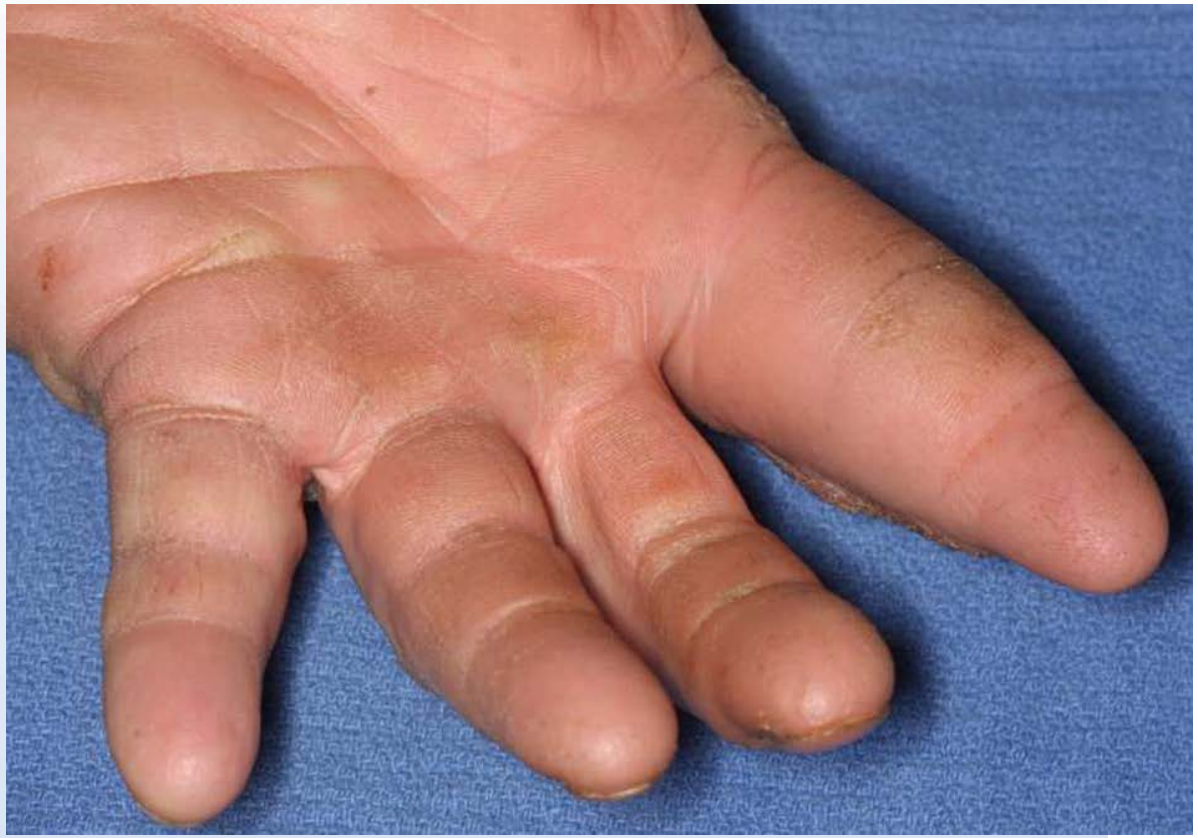
Geisinger

Case Presentation:

70 year old M with history of AAA and psoriatic arthritis last seen in the Rheumatology office 2 years ago

- Initially developed L hand and finger painless swelling 8 months prior
  - Seen by PCP and placed back on prior MTX and low dose Prednisone
- Noted improvement in hand swelling but finger swelling persisted
- Denied direct trauma, fevers, chills or recent illnesses
- Extensive skin thickening with blistering over past 2 months
- Admits to frequent abrasions while working as cattle/dairy farmer
- No other joint complaints or active psoriasis





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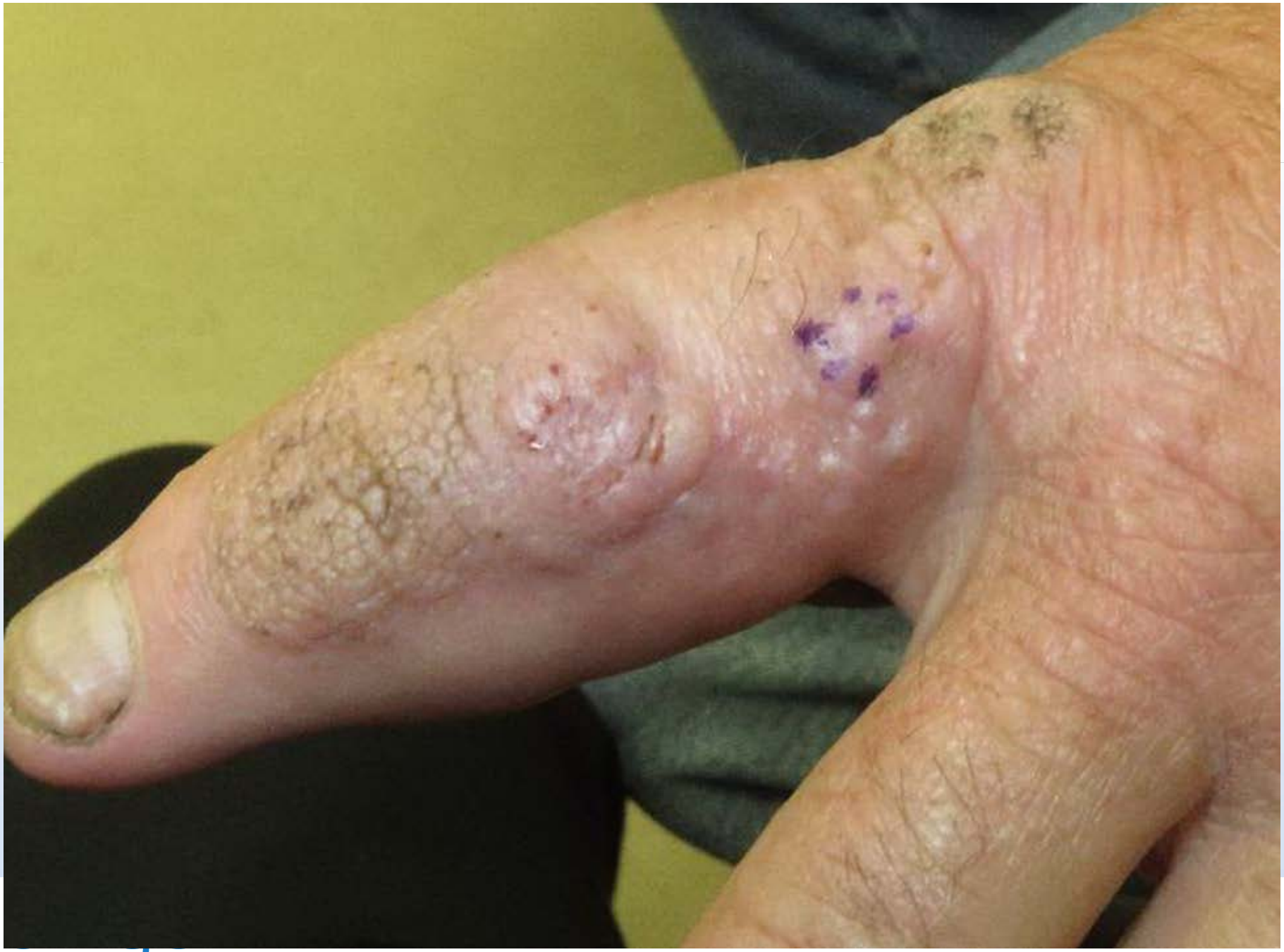

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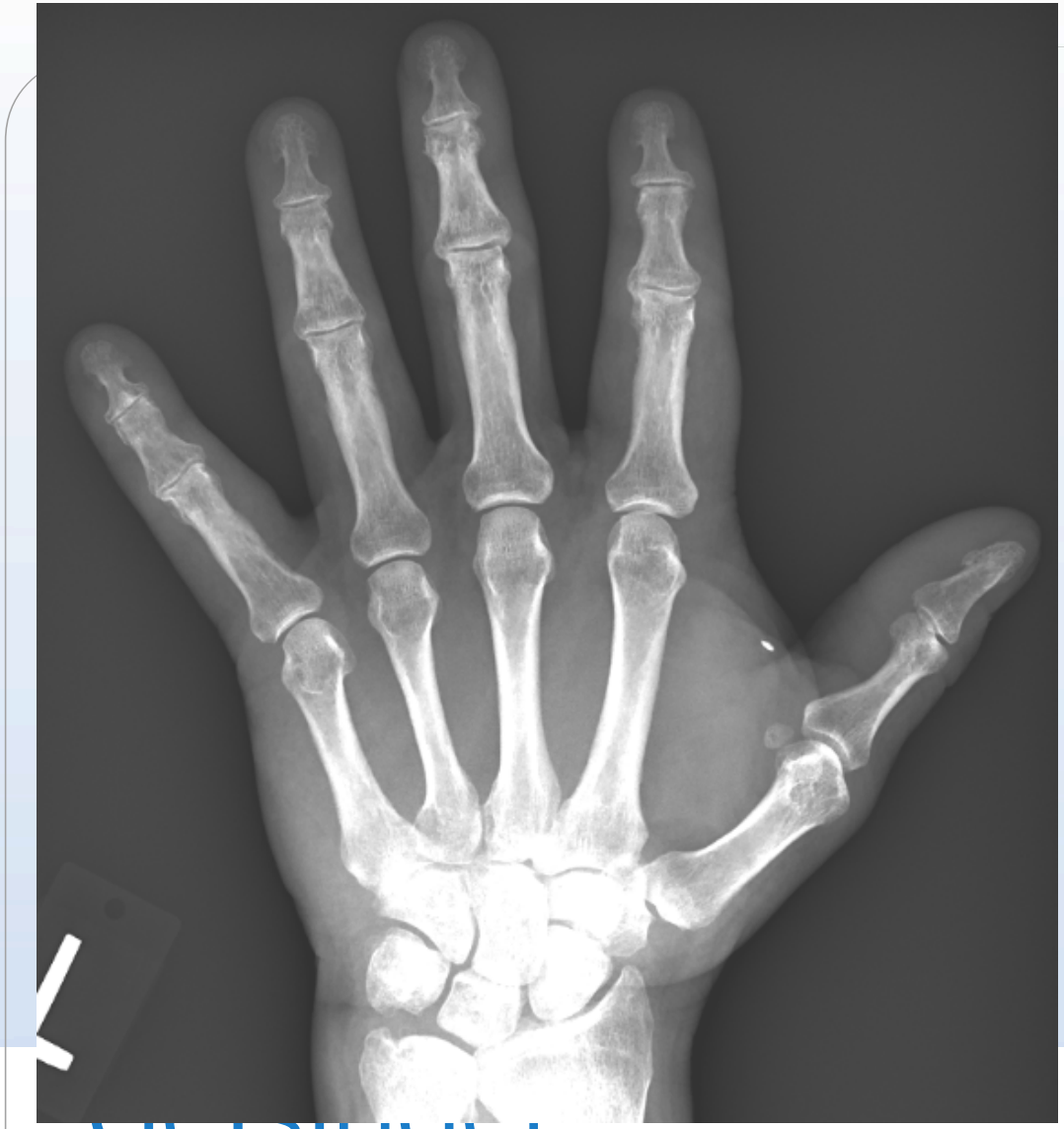
Differential at this point?

- Psoriasis
- Indolent infection
  - Fungal, AFB, Brucella or viral
- Soft tissue tumor
- Elephantiasis
- Squamous cell ca
- PEH (pseudoepitheliomatous hyperplasia)

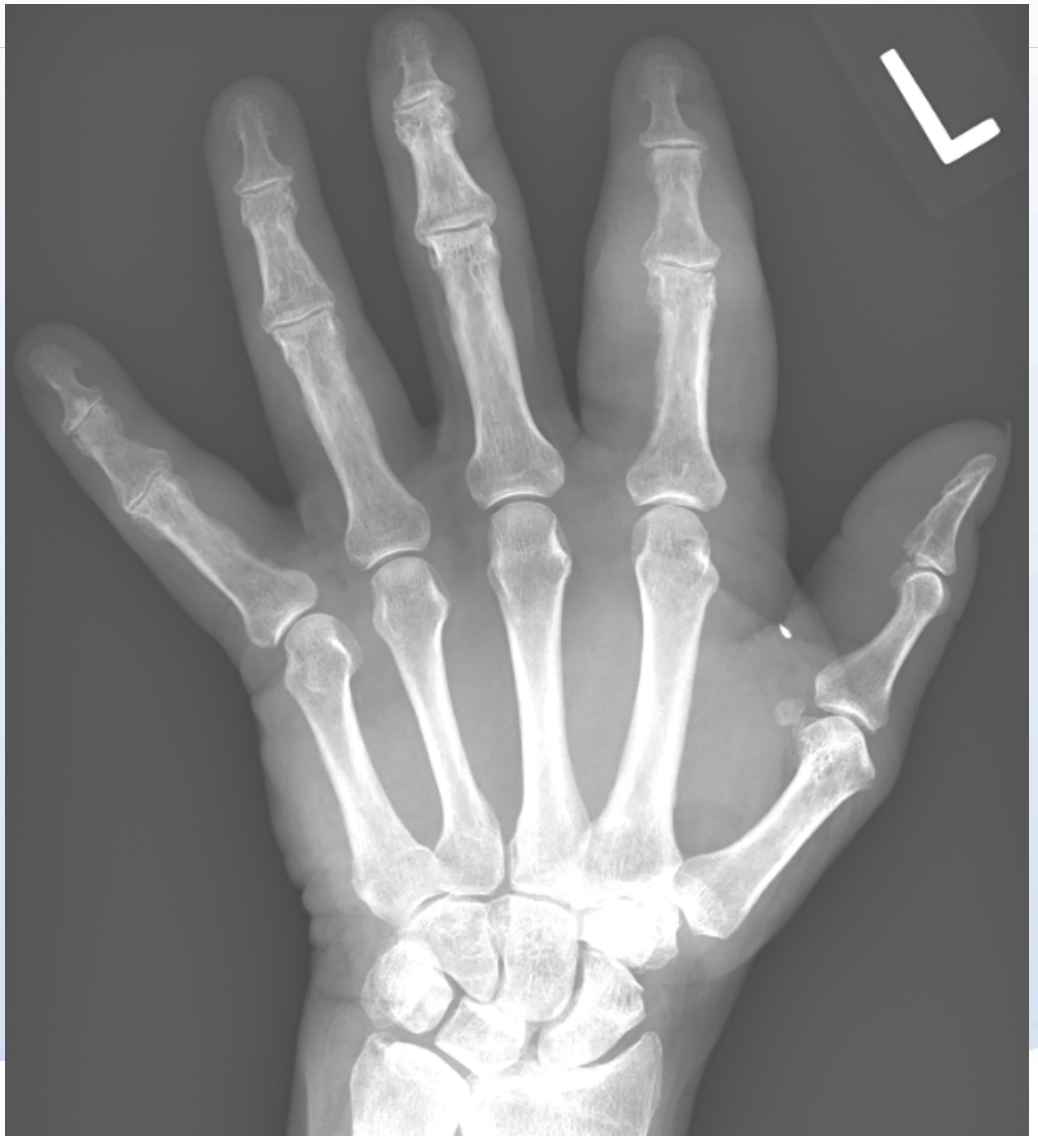
Next steps in work-up?

- X ray / MRI
- ? Refer to Dermatology
- ? Refer to Orthopedics
- Refer to both?

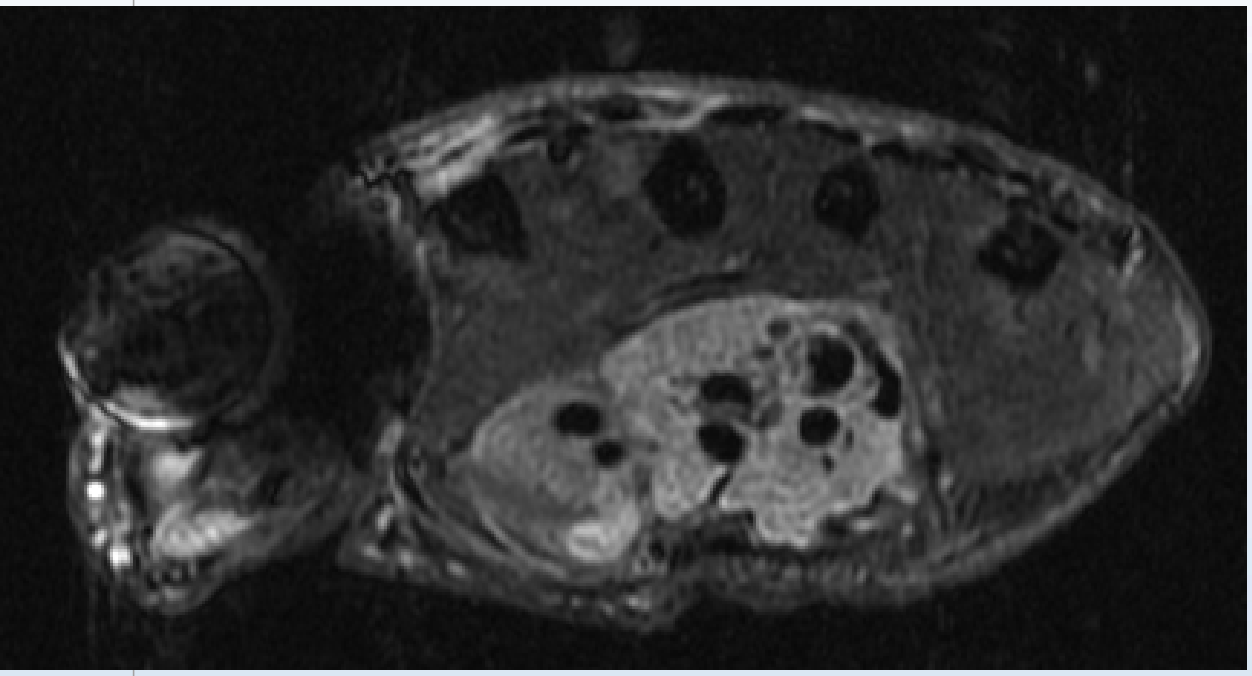
September 2013

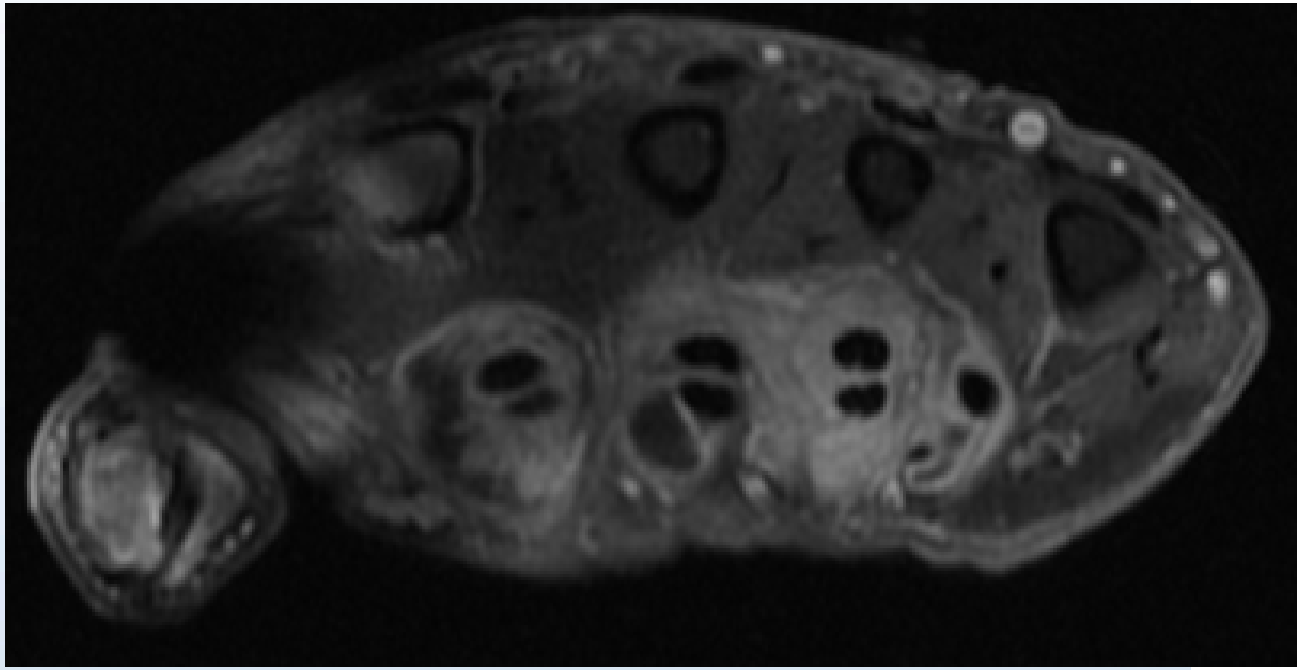


Current



MRI – 3 weeks later





Case Presentation:

SURGICAL PATHOLOGY DIAGNOSIS

Electronically Signed Out: | - GMC Lab

A. Skin, right index finger palmar: Dense dermal granulomas with various foreign materials (see comment)

B. Skin, right index finger dorsal: Verrucous epidermal hyperplasia with underlying dense dermal granulomas (see comment)

Comment: The histologic findings are consistent with a granulomatous and verrucous reaction to foreign material. At least some of the foreign material is consistent with silica (sand), suggestive of prior trauma. Clinical correlation is required to exclude the possibility of background sarcoidosis. GMS and auramine rhodamine stains are negative for fungal and mycobacterial organisms, which does not completely exclude the possibility of infection as organisms may be very sparse. No suppuration is identified on H&E microscopy. If an infectious process remains a significant clinical concern additional biopsies including biopsy for culture could be performed.

Case Presentation:

3 weeks after punch biopsy

Routine Culture	Moderate growth of normal skin flora
Fungal Smear	No yeast or hyphae seen
AFB Smear	No acid fast bacilli seen
AFB Culture	No acid fast bacilli seen
Fungal Culture	**+ Paecilomyces Species**

Case Presentation:

- Infectious Disease starts patient on Itraconazole 200mg BID
- Discussion with Orthopedics for surgical intervention
  - Large mass on volar aspect of index finger
  - Approximately 30cc of yellow granular fluid extending along flexor tendon and sheath

Gram Stain	No organisms seen x 3
Fungal Smear	No yeast or hyphae seen x 3
AFB Smear	No acid fast bacilli seen x 3
AFB Culture	**+ Mycobacterium species x 3**
Fungal Culture	No fungus isolated x 3
Anaerobic Culture	No aerobic or anaerobic growth x 3

Case Presentation:

- Mycobacterium arupense
  - Emerging infectious cause of tenosynovitis
    - 8 case reports have been published
      - 5 were cases of tenosynovitis
      - Hand was site of infection in all cases and 4 out of 5 reported prior trauma
    - Usually multi drug resistant
      - Consistently susceptible to clarithromycin, ethambutol and rifabutin
      - Resistance to rifampin and quinolones
    - AFB stain was negative in all cases, cultures have prolonged incubation

Learning Objective:

- Always consider an indolent infection particularly in patients on chronic immunosuppression

- Questions?