Diabetic Male
Multiple Medical Problems
Rule out Osteomyelitis

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Diagnosis:
Sequela of Myonecrosis
Involving the
Flexor Hallucis Longus Muscle

Etiology?
Sequela of Compartment Syndrome
Or
Diabetic Myonecrosis
Myonecrosis

- Diabetes (DM)
- Compartment Syndrome
- Crush Injury
- Sickle Cell Crisis
- Severe ischemia
- Intraarterial chemotherapy
- Rhabdomyolysis
- Necrotizing Fascitis
- Can mimic an abscess
  - Clinical
  - MR
DM

- Distinctive
- Poorly controlled
- Severe pain compared to mild physical exam
- Low grade fever
- Negative cultures
- MR
  - Muscle edema and enhancement surround the infarcted muscle
Compartment Syndrome

- Confined compartment space with increased pressure
- Trauma, burns, exercise, extrinsic pressure, intramuscular hemorrhage
- Venous occlusion, muscle and nerve ischemia, arterial occlusion, tissue necrosis
Compartment Syndrome

- Severe pain
- Sensory and motor neuropathy
- MR
  - Extremity swelling
  - Diffuse edema
- Intracompartmental pressures
- Fasciotomy
Additional Considerations

• Myositis Ossificans
  – Clinical
  – Imaging
  – False positive biopsy
    • Osteosarcoma
      » Osteoid
      » Mitotic spindle cells

• Dermatomyositis
  – Autoimmune
  – Sheetlike calcification
  – Biopsy
Muscle atrophy

- Fat atrophy vs. fat infiltration vs. atrophy vs. fat replacement

- Etiology is complex and not well understood
  - Spectrum of fat and fibrosis replacement and infiltration
  - Muscle atrophy -> fat replacement
  - Histology
    - Adipocytes
    - Intramuscular fat globules
    - Intramyocellular fat droplets

- Mechanical unloading and denervation
References
