Case of the Month - October 2013

• 50 year old male with 2 week history of dysphagia and odynophagia. No trauma.

• Investigations reveal:
  – Temperature 37.5
  – WBC normal
  – C-spine X-rays reveal prevertebral soft tissue swelling.
Contrast Enhanced CT of the Neck

• What are the imaging findings?
• What is the differential diagnosis? Diagnosis?
Sagittal Soft Tissue and Bone Windows
Axial Soft Tissue Window
Coronal Soft Tissue Window
Axial Bone Window
Findings

• Smooth soft tissue edema and swelling within the prevertebral soft tissues from C1-C4
• No evidence of peripheral enhancement.
• Amorphous soft tissue calcifications surrounding the atlanto-axial joint.
Differential Diagnosis

- Retropharyngeal abscess?
- Retropharyngeal effusion?
- Perivertebral space infection?
- Other?
Diagnosis

- Findings are most in keeping with calcific tendonitis of the longus colli muscle.
- Infection or retropharyngeal abscess are less likely given that the patient is not febrile, has a normal white count, and the collection does not exhibit peripheral enhancement.
Discussion

• A rare diagnosis; first described by Hartley in 1964.

• Clinical presentation: dysphagia, odynophagia, subacute neck pain, and low grade pyrexia. There may be preceding URTI or minor neck trauma.

• Demographics: Most common amongst 30-60 year olds. No male/female predominance.
Discussion

• Pathophysiology: granulomatous and/or inflammatory reaction due to deposition of calcium hydroxyapatite crystals within the fibers of the longus colli that insert into C1/C2.

• Treatment: anti-inflammatory and analgesic medications. Incision and drainage is NOT required.
Discussion

The 3 imaging findings most suggestive of the diagnosis:

- Amorphous calcifications in the prevertebral muscles, particularly C1-C2
- Inflammation with swelling of prevertebral muscles
- Smoothly expanding retropharyngeal space edema

References


• StatDx – Acute Calcific tendonitis of the longus colli