Longus Colli Calcific Tendinitis
Hemang Kotecha, DO

Background:
• Deposition of calcium hydroxyapatite crystals in the longus colli tendon
• May be secondary to systemic or local metabolic disturbances

Clinical Presentation:
• Neck pain and limited range of motion
• Pain or difficulty with swallowing
• Leukocytosis, elevated inflammatory markers, and fever

Imaging:
• Calcification and soft tissue swelling in the prevertebral space, usually C1-C3
• CT is the best modality for detecting calcification

Fig 1. CT Findings. Axial contrast-enhanced images depict amorphous calcifications anterior to C2 (a) as well as thickening and decreased attenuation of the longus colli muscle belly (b). Sagittal image (c) in the same patient demonstrates an elongated prevertebral fluid collection without peripheral enhancement.
Fig 2. MRI findings. Sagittal STIR sequence depicts globular low-signal calcification (arrowhead) anterior to the dens and associated prevertebral edema (arrow).

Differential Diagnosis:
1. Retropharyngeal abscess
2. Cervical osteomyelitis
3. Diffuse idiopathic skeletal hyperostosis
4. Calcium pyrophosphate deposition disease
5. Gout
6. Hemodialysis arthropathy
7. Tumoral calcinosis

Treatment:
- Self-limiting disease that usually resolves in 1-2 weeks
- Conservative management with NSAIDs +/- neck immobilization for symptomatic relief

References