Calcific tendinitis of the longus colli muscle

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CAPSULE SUMMARY

What is already known
Acute calcific tendinitis of the longus colli muscle is a rare, benign, and self-limited condition characterized by acute-onset neck pain, neck stiffness, and odynophagia.

What is new in the current study
This case highlights how acute calcific tendinitis of the longus colli muscle can mimic the clinical presentation of neck arterial dissection, potentially resulting in a failure to recognize acute calcific tendinitis in initial cross-sectional imaging examinations focused on blood vessels.
An otherwise healthy woman in her 50s presented to the emergency department with a 7-day history of odynophagia and posterior neck pain, radiating to the occipital region and worsening with movement. No fever or cervical stiffness was noted. Her C-reactive protein level was high (112 mg/L), and her white blood count was 12,800/µL.

At first, a carotid or vertebral artery dissection was considered as the probable diagnosis, but it was excluded by computed tomography (CT) angiography. Neck CT and magnetic resonance imaging (MRI) exams were performed later (Figs. 1, 2) and confirmed the diagnosis of acute calcific tendinitis of the longus colli muscle (ACTLCM). In retrospect, the imaging findings revealed that the characteristic features of ACTLCM had been overlooked on the initial CT angiography exam.

ACTLCM is a rare, self-limited condition characterized by calcium deposition in the superior oblique tendon fibers of the longus colli muscle and a secondary inflammatory reaction. Typical symptoms are acute-onset odynophagia, neck pain, and stiffness; other symptoms include limited cervical range of motion, occipital headache, trismus, and low-grade fever. These symptoms can be misdiagnosed as meningitis or another life-threatening condition such as retropharyngeal abscess or infectious spondylitis. Dysphagia, odynophagia, and the absence of photophobia are clinical aspects more often associated with retropharyngeal processes, and they can help differentiate ACTLCM from meningitis [1]. Specific imaging findings include amorphous calcifications anterior to the C1–C2 vertebrae with adjacent soft-tissue edema and retropharyngeal effusion, and they can help to exclude spondylitis and retropharyngeal abscess. CT and MRI are preferable to radiographs. Treatment includes immobilization, analgesics, and nonsteroidal anti-inflammatory drugs, as well as corticosteroids in severe cases. Symptoms usually resolve within 2 weeks. This patient received analgesics, corticosteroids, and a cervical collar, and the symptoms resolved in 5 days. Early and accurate diagnosis is the key to proper patient management [2–4].

ETHICS STATEMENT

All personal data were removed, and images were entirely anonymized.

CONFLICT OF INTEREST
No potential conflict of interest relevant to this article was reported.

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None.

AUTHOR CONTRIBUTIONS:

Conceptualization: RML; Data curation: DVS; Investigation: all authors; Project administration: DVS; Supervision: DVS; Visualization: DVS; Writing–original draft: all authors; Writing–review & editing: all authors. All authors read and approved the final manuscript.

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REFERENCES


**FIGURE LEGENDS**

**Fig. 1.** (A, B) Sagittal contrast-enhanced computed tomography images show an amorphous calcification at the C1–C2 level (arrowheads), with adjacent soft-tissue thickening (white arrows). There is nonenhancing fluid in the retropharyngeal space consistent with effusion (yellow arrow).

**Fig. 2.** T2-weighted magnetic resonance images show effusion in the retropharyngeal space (yellow arrows). Soft-tissue thickening and edema at the level of the superior fibers of the right longus colli muscle are also visible (short arrows). (A) Sagittal view. (B) Axial view.