Calcific tendonitis of longus colli: a rare cause of neck pain

Amy Bryce, Niall Woodley, Andrew Williamson, Catriona Douglas

DESCRIPTION

A 54-year-old man presented with a 5-day history of progressive left-sided neck pain, stiffness and odynophagia. There was no associated fever, history of trauma or airway compromise. The patient was fit and well with no medical history. Physical examination of the neck revealed severely reduced range of movement in all cervical planes. Oral cavity and neurological examinations were normal, and generalised pharyngeal oedema was seen on flexible nasendoscopy. The patient was afebrile throughout with other physiological observations within normal limits. Only a mildly raised C reactive protein was noted on blood work.

The patient was taken for urgent contrast CT neck, revealing a prevertebral fluid collection of unclear aetiology extending from the clivus to the inferior border of C5 (figure 1). An area of calcification was noted below the anterior arch of C1, in keeping with calcification at the superior insertion of the longissimus coli tendon (figure 2). To further evaluate these findings, MRI neck with contrast was performed 3 days later. This demonstrated a prevertebral fluid collection with enhancement extending down to level of the upper border of T2 and again revealing calcification in the left longus colli muscle.

Along with the differential diagnosis of calcific tendonitis of longus colli (CTLC), the fluid collecting inferior to C1 could have represented a retropharyngeal abscess—a potentially life-threatening infection. The imaging was reviewed with multiple specialties including radiology, otolaryngology, infectious diseases, neurosurgical and rheumatology teams; concluding that the most likely diagnosis was CTLC with associated oedema creating a fluid collection—supported by the clinical condition of the patient who remained well. Treatment was with regular non-steroidal anti-inflammatory medication with proton pump cover and physiotherapy. Other published cases have described the use of steroids, H2 antagonists, surgical intervention and cervical collars; however, there is little evidence to support their use.

Current literature describes most CTLC cases to be self-limiting and resolve spontaneously in 1–2 weeks, as was the case here. Exact aetiology is unknown, however calcification may occur following injury or repetitive trauma, similar to that of calcific tendinitis in other locations. It later came to light that the patient had been performing extensive pruning of trees prior to presentation requiring prolonged periods of neck extension, while carrying heavy machinery, and episodes of sharp flexion to avoid falling branches.

Although CTLC represents a benign and perhaps under-recognised condition, this case highlights the importance of considering other differential diagnoses in a patient presenting with limited neck movements. This patient was systemically well making a retropharyngeal abscess unlikely, however dismissing this could have had catastrophic consequences for the patient as an abscess would have required prompt airway management and surgical drainage. Literature has demonstrated the pathognomonic finding of prevertebral oedema associated with CTLC; however, the fluid collection seen here was not immediately characteristic and mimicked a more clinically concerning diagnosis of an abscess. Luckily for this patient, prompt recognition of
CTLC prevented any unnecessary intervention and allowed for a full recovery.

Learning points

► Acute calcific tendonitis of longus colli (CTLC) is a rare condition that usually presents with neck pain and stiffness.
► Fluid collections caused by CTLC associated oedema can resemble abscess formation in the retropharyngeal area.
► After excluding other causes of neck pain, the mainstay of treatment is anti-inflammatory medications and physiotherapy.

Contributors

AB am the main author and contributor to the report. AB researched the patient and wrote the main body of text, and is responsible for all submissions and correspondence. Other co-authors include NW who assisted in editing the text and providing images for the report. AW another co-author, also contributed to editing of text and application process. CD was responsible for final review of text and was the consultant responsible for managing and identifying the patient for publication.

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REFERENCES


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