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## Case Report

# Acute calcific tendinitis of the longus colli: A case report ☆,☆☆

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## ABSTRACT

Acute calcific longus colli tendinitis is a differential diagnosis of neck pain. Typical presentation consists in a triad of symptoms including acute onset neck pain, neck stiffness and odynophagia. Computed tomography (CT) is the gold standard for acute calcific longus colli tendinitis diagnosis and the main radiological findings include prevertebral soft tissue swelling and the presence of amorphous calcifications. The case involves a 39-year-old female who presented to the emergency department with acute unilateral cervical pain that resulted in acute calcific longus colli tendinitis.

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## Introduction

Acute calcific longus colli tendinitis (ACTLC), also known as retropharyngeal calcific tendinitis, is a rare condition caused by an aseptic inflammatory response to acute or subacute deposition of calcium phosphate in the tendons of the longus colli muscle (C1-C3 vertebral level) [1,2].

Typical presentation consists in a triad of symptoms including acute onset neck pain, neck stiffness, and odynophagia. Other symptoms include occipital headaches, limited cervical movement, mild fever, trismus, and pharyngeal/cervical edema [3–5].

It represents an underreported disease that routinely goes misdiagnosed as retropharyngeal abscess, among other conditions, which could lead to unnecessary surgical interven-

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**Fig. 1 – Sagittal view of CT of demonstrating longus colli calcific deposition (arrow).**

tions [4]. We present a case involving a 39-year-old female who presented to the emergency department with acute unilateral cervical pain that resulted in acute calcific longus colli tenosynovitis.

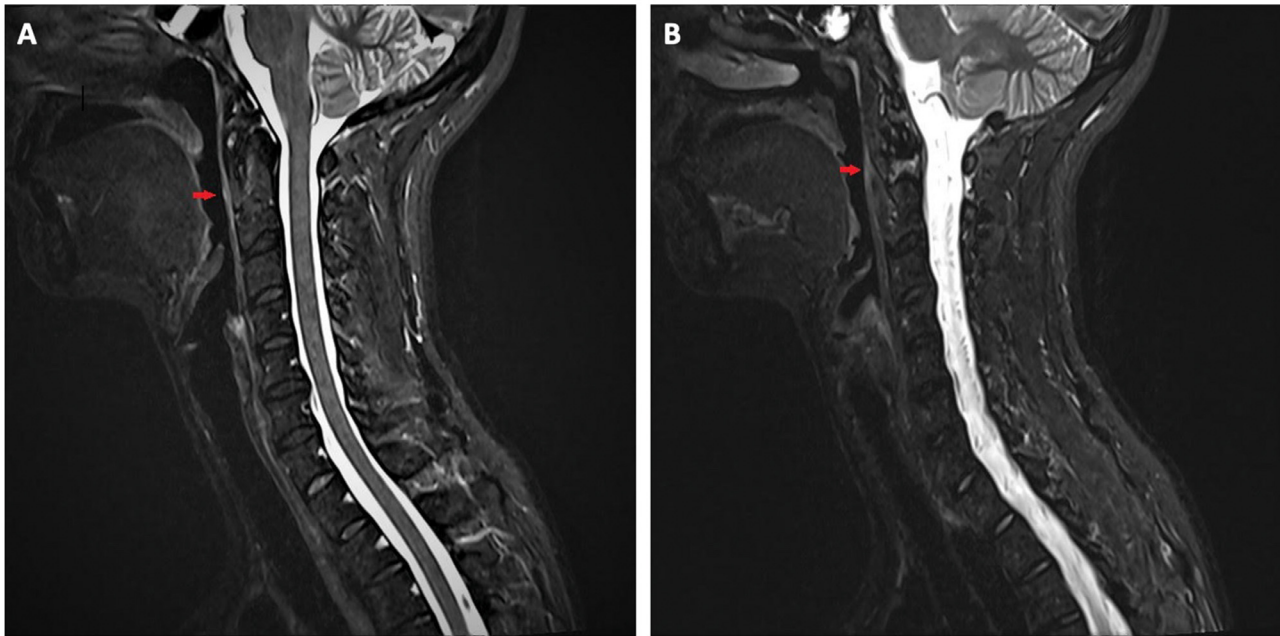
### Case report

The case involves a 39-year-old female who presented to the emergency department with acute unilateral right cervical pain that worsened with mobilization and was accompanied by neck stiffness and odynophagia. Computed tomography (CT) showed diffuse edema of the retropharyngeal space and calcifications up to 8 mm in relation to the right longus colli tendon (Fig. 1). Magnetic resonance imaging (MRI) showed slight edema of the retropharynx (Fig. 2). She was treated with nonsteroidal anti-inflammatory drugs (NSAIDs), and neck immobilization with complete resolution of her symptoms.

### Discussion

ACLCT is considered a rare disease and an infrequent cause of acute neck pain. ACLCT affects individuals who are in their third to fifth decade of life and appears to have no sex predilection [2,6,7]. ACLCT can usually be mistaken with other serious conditions such as retropharyngeal abscess, disk herniation, neck tumor, cervical artery dissection, cervical osteomyelitis, trauma, spondylodiscitis and meningitis [6,8]. The etiology of this condition is unknown; however some risk factors are thought to be involved such as repetitive trauma, recent injury, degenerative cervical disorders, osteoarthritis, tissue necrosis, renal failure, or vascular disorders [9,10]. Mildly elevated erythrocyte sedimentation rate, C-reactive protein and leukocytosis may be present [11,12].

The initial evaluation of the adult patient with neck pain without recent major trauma focuses largely on excluding serious conditions that may require intervention. The initial as-



**Fig. 2 – STIR (A) and T2 (B) sagittal MRI demonstrating slight edema of the retropharynx (arrows).**

assessment begins with identifying any red flags such as recent neck trauma, neurologic symptoms, shock-like paresthesia with neck flexion, fever or chills, history of injection drug use, immunosuppression, chronic glucocorticoid use, unexplained weight loss, history of cancer, headache, shoulder or hip girdle pain, or visual symptoms in older patients and anterior neck pain. Patients without red flags usually do not require imaging. If indicated, a cervical spine radiography is performed first [13]. Hence why ACLCT is frequently underdiagnosed. A high suspicion and familiarity with the clinical presentation is warranted for its diagnosis.

Radiography in ACTLC may show calcifications, however contrast-enhanced computed tomography is the gold standard for ACTLC diagnosis. The main radiological findings include prevertebral soft tissue swelling extending from C1 to C6 vertebrae and the presence of amorphous calcifications in the superior fibers of the longus colli muscle tendons. Occasionally the inferior fibers may be affected, as low down as T3. Retropharyngeal effusions and edema of the adjacent prevertebral soft tissue may also be seen. Enhancement around the effusion is typically minimum. If present, the most likely diagnosis is a retropharyngeal abscess [14–16].

Magnetic resonance imaging can show prevertebral edema and fluid effusion; however, calcifications are much harder to visualize. The presence of peripheral enhancement and/or suppurative lymphadenopathy suggest infection as the underlying cause [6,11,15–17].

ACLCT usually resolves spontaneously within 1 to 2 weeks, but NSAIDs, and cervical immobilization can help alleviate the symptoms faster [1].

ACLCT is an underdiagnosed disease with few reports in the literature, likely due to its benign course and nonspecific symptoms. Becoming familiar with this condition is relevant to differentiate ACLCT from life-threatening conditions pre-

senting in a similar fashion and avoiding unnecessary medical interventions.

### Patient consent

I confirm that written informed consent was obtained from the patient in this case report.

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