

Caso Clínico / Radiological Case Report

Acute Calcific Tendinitis of the Longus Colli Muscle

Tendinite Calcificante Aguda do Músculo Longo do Pescoço

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Abstract

Acute calcific tendinitis of the longus colli (CTL) is a rare, self-limited and probably underdiagnosed cause of acute neck pain in which the radiologist can make a definitive diagnosis. It commonly mimics potentially serious conditions affecting the retropharyngeal space. We report a case of a 63-year old male presenting in the emergency department with acute throat pain. Imaging findings were diagnostic of CTL. A brief review of the literature is provided.

Keywords

Calcific tendinitis; Retropharyngeal edema; Torticollis; Odynophagia.

Resumo

A tendinite calcificante aguda do músculo longo do pescoço é uma entidade rara, auto-limitada e provavelmente subdiagnosticada de dor cervical aguda, na qual o radiologista pode fazer o diagnóstico definitivo. Esta entidade mimetiza clinicamente outras causas potencialmente graves de dor cervical aguda. Os autores reportam um caso de um homem de 63 anos de idade que se apresentou no serviço de urgência com odinofagia. É também apresentada uma breve revisão da literatura acerca do tema.

Palavras-chave

Tendinite calcificante; Edema retrofaringeo; Torcicolo; Odinofagia.

Case Presentation

A 63 year-old man presented to the emergency department with a two-day history of throat pain, odynophagia and new onset of left torticollis. His past medical history was unremarkable except for active smoking. On physical examination, he was afebrile and slight bulging of the posterior oropharyngeal wall was noted, without associated inflammatory signs or cervical palpable lymphadenopathy. Laboratory tests revealed no leukocytosis ($9,78 \times 10^9/L$) and mildly elevated C-reactive protein (23,5 mg/L; normal value < 3,0 mg/L). Contrast-enhanced CT scan of the neck was requested for suspected retropharyngeal abscess.

CT evaluation revealed an amorphous nodular pericentimetric calcification in the prevertebral muscles anterior to C2 (Fig. 1). A reactive laminar retropharyngeal effusion without enhancing walls measuring 4 mm in thickness (Fig. 2) was also noted, but no cervical abscesses or lymphadenopathy were present. Imaging diagnosis was acute calcific tendinitis of the longus colli muscle. The patient was discharged and symptomatically treated with non-steroid anti-inflammatory agents.

Discussion

The longus colli is a bilateral muscle involved in flexion of the neck that lies anterior to the vertebral column, extending from the anterior tubercle of the atlas to the level of T3 vertebral body, and consists of superior, central and inferior fibers.^{1,2} Acute calcific tendinitis of the longus colli (CTL) is a rare, self-limited and probably underdiagnosed cause of acute neck pain. Histopathologically, the condition is similar to

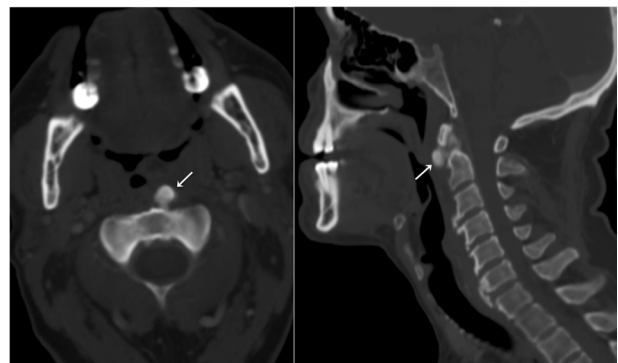


Figure 1 – Axial (left) and sagittal (right) CT images in bone window. An amorphous intermediate density nodular calcification is seen in the prevertebral muscles anterior to C2 (arrows). In this clinical context, this imaging appearance is typical of acute calcific tendinitis of the longus colli muscle.

calcific tendinitis elsewhere in the body, being characterized by deposition of calcium hydroxyapatite crystals in the tendon.³

Patients are usually between 30 and 60 years of age and there is probably a slight female predominance.⁴ The most common clinical presentation of this condition consists of neck pain, stiffness and odynophagia, with dysphagia being occasionally reported.^{3,5} In our case, an atypical symptom was also present (torticollis). Laboratory tests may reveal leukocytosis and elevated C-reactive protein or erythrocyte sedimentation rate, mimicking infection.³⁻⁵ This constellation of findings may aware the clinician of a potentially serious condition such as retropharyngeal

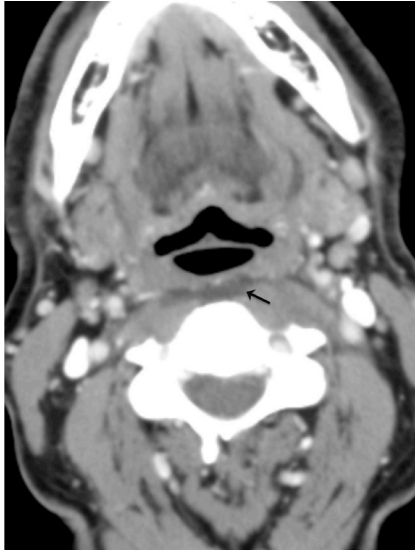


Figure 2 – Contrast-enhanced axial CT image of the neck in soft tissue window depicts a laminar retropharyngeal effusion without enhancing walls (arrow). This is most probably reactive in nature.

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Confidentiality of data: The authors declare that they have followed the protocols of their work center on the publication of data from patients.

Proteção de pessoas e animais: Os autores declaram que os procedimentos seguidos estavam de acordo com os regulamentos estabelecidos pelos responsáveis da Comissão de Investigação Clínica e Ética e de acordo com a Declaração de Helsínquia da Associação Médica Mundial.

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abscess or cellulitis, prompting imaging evaluation.

Radiography (in lateral projection) may depict amorphous calcification in the prevertebral soft tissues, although small or less dense calcific deposits may be easily missed.^{1,2} Computed tomography (CT) is considered the gold standard for diagnosis as it can identify both the calcific deposits and the retropharyngeal edema. Also, it can distinguish retropharyngeal tendinitis from abscess, which is the most frequent mimicker of this condition.⁵ CTLC involves the superior insertion of the longus colli muscle, typically at C1-C2 level.² Of note, calcific deposits in CTLC tend to lie slightly off the midline, consistent with the oblique course of the muscle as it ascends from C3-C5 to insert on the anterior tubercle of the atlas.³

Treatment consists of supportive medication with analgesics and non-steroidal inflammatory agents, with expected resolution of symptoms in 1 to 2 weeks.^{1,2,4} This is in contrast with antibiotics and possible surgical drainage of retropharyngeal abscesses. As such, awareness of this condition is crucial for the emergency radiologist, as it is almost always an imaging diagnosis.

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