



## Trismus Secondary to Acute Calcific Retropharyngeal Tendinitis

IMAGE

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A 26-year-old man presented with a 1-day history of neck pain, headache, and odynophagia. His body temperature was 37.5°C. Bilateral posterior cervical tenderness and a limited range of active neck movement due to severe pain was observed upon passive cervical movement in all directions. His mouth opening was measured at <2 fingerbreadths, and he strongly resisted passive mandibular movement, as it exacerbated his neck pain. An intraoral examination revealed no abnormalities.

Laboratory test results yielded a white blood cell count of  $11.43 \times 10^9/L$  (normal range:  $3.58\text{--}8.15 \times 10^9/L$ ) with 69.4% neutrophils. Contrast-enhanced computed tomography (CT) of the neck revealed retropharyngeal calcification anterior to the base of the dens at the superior oblique portion of the longus colli muscle (Fig. 1). There was no evidence of prevertebral soft tissue thickening or the rim enhancement and fluid collection indicative of retropharyngeal abscess. The patient was diagnosed with acute calcific retropharyngeal tendinitis. Oral non-steroidal anti-inflammatory drug administration alleviated his neck pain, and he was discharged 1 day after admission. The neck pain resolved within a few days, and he reported no symptom relapse at a follow-up visit 10 days after discharge.

Acute calcific retropharyngeal tendinitis is a self-limiting aseptic inflammation of the longus colli tendon due to calcium hydroxyapatite crystal deposition (1). Symptoms typically include sudden-onset neck pain, limitation of neck movement, and odynophagia (2). Neck stiffness, dysphagia, sore throat, and, rarely, trismus can also occur, as observed in this case (1). This condition can be diagnosed radiographically based on prevertebral soft tissue swelling and calcification anterior to the C1 and C2 vertebrae. CT imaging is more sensitive than plain cervical radiography, which can provide inconsistent images of amorphous calcifications (1). Spontaneous resolution of symptoms and calcification resorption is usually noted after 1–2 weeks. Short-term administration of non-steroidal anti-inflammatory drugs can relieve the symptoms.

This condition is benign and should be differentiated from other serious diseases, such as a retropharyngeal abscess, pyogenic spondylosis, or meningitis. Most patients with a retropharyngeal abscess present with similar symptoms, including neck pain, sore throat, dysphagia, and odynophagia. However, an amorphous calcification anterior to the C1 and C2 vertebral bodies without the characteristic rim-enhancing fluid collection in the prevertebral space detected on a contrast-enhanced CT image is more likely to be acute calcific retropharyngeal tendinitis (3). Careful consideration of the differential diagnoses can help to avoid unnecessary and invasive examinations and treatment.



**Figure 1. Sagittal view computed tomography image of the neck demonstrating amorphous retropharyngeal calcification at the base of the dens (white arrow)**

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