

# Woman with neck pain and odynophagia

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## 1 | PATIENT PRESENTATION

A previously healthy 50-year-old woman presented to the emergency department with neck pain, odynophagia, and fever. Physical examination revealed neck range of motion limitations to the left and right, and neck motion worsened pain. Laboratory investigations showed an elevated WBC count and C-reactive protein level. Intravenous contrast-enhanced computed tomography (CT) of the neck revealed retropharyngeal fluid collection (Figure 1). A radiologist and otolaryngologist were consulted for suspected retropharyngeal abscess. Antibiotics were initiated and incisional drainage was performed under general anesthesia. Although incisional drainage was performed, there was no discharge of pus from the retropharyngeal space.

## 2 | DIAGNOSIS

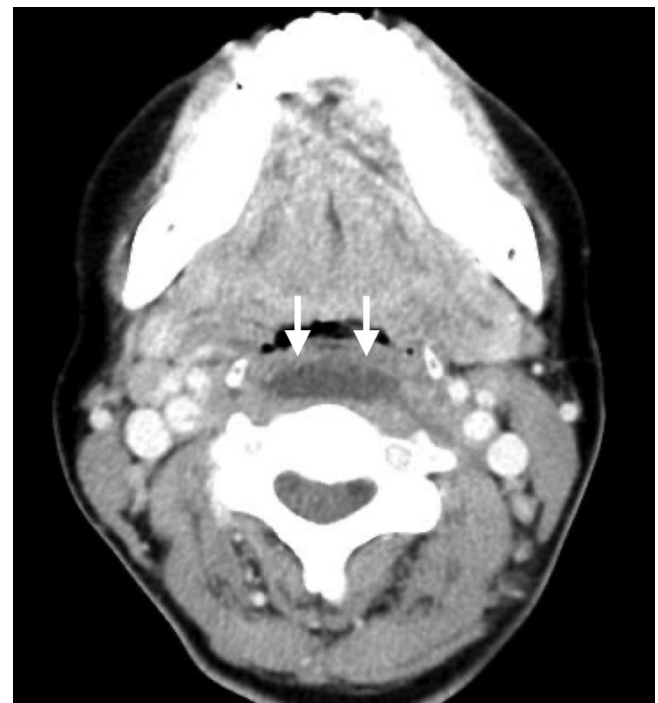
### 2.1 | Acute calcific retropharyngeal tendinitis

## 3 | DISCUSSION

CT findings retrospectively showed calcification in the longus colli muscle tendons (Figure 2). She was diagnosed with acute calcific retropharyngeal tendinitis. The administration of nonsteroidal anti-inflammatory drugs gradually ameliorated her symptoms.

Acute calcific retropharyngeal tendinitis is caused by the deposition of calcium hydroxyapatite crystals and subsequent inflammation in the longus colli muscle and tendon.<sup>1</sup>

Clinical and radiological presentation of acute calcific retropharyngeal tendinitis can mimic a retropharyngeal abscess that is a potentially serious condition.<sup>2</sup> CT with intravenous contrast ultimately is

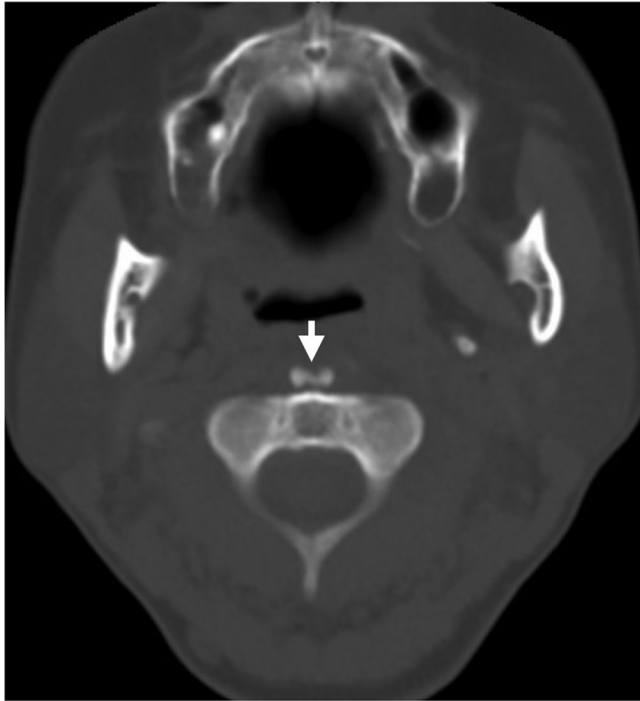


**FIGURE 1** Intravenous contrast-enhanced computed tomography of the neck (axial view) demonstrating a fluid collection (arrows) in the retropharyngeal space

necessary to distinguish these diseases, but point of care ultrasound (POCUS) is useful to evaluate the retropharyngeal space simply and promptly.<sup>3</sup> Although we did not attempt to use POCUS, a bedside ultrasonography of the neck can reveal a collection anterior cervical vertebra. The characteristic CT findings include calcification anterior to the C1-C2 vertebra and symmetrical non-rim-enhancing retropharyngeal

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**FIGURE 2** Computed tomography of the neck (axial view) demonstrating a calcification (arrow) in the longus colli muscle tendons

effusion.<sup>4,5</sup> This case was an acute calcific retropharyngeal tendinitis misdiagnosed as a retropharyngeal abscess. It was considered that the

diagnostic error consisted of premature closure because of overconfidence bias of specialist consultation. In this case, because the findings of physical examination and CT (calcification and lack of rim enhancement) were inconsistent with retropharyngeal abscess, reconsideration of the diagnosis was essential to avoid unnecessary antibiotic use and invasive intervention.

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