Acute calcific tendinitis of the longus colli muscle

Michael Plunkett, Hugh De Lautour, Adam Worthington

A 35-year-old female presented with a two-day history of severe neck pain and stiffness—particularly on the left—and moderate odynophagia. She had no history of fevers or trauma. She had tenderness on palpation of left cervical paraspinal tissue posteriorly, and marked limitation of cervical spine motion. White blood cell count was 15.5x10^9/L and C-reactive protein was 88mg/L (0–5mg/L). Cervical spine radiograph showed an area of calcification measuring 13x6mm within the prevertebral tissue anterior to C2 (Panel A, arrow) and prevertebral soft tissue swelling superiorly. Computed tomography (CT) of the neck revealed an amorphous focus of calcification within the left longus colli muscle anterior to the C2 vertebral body (Panels B and C, arrows), with associated simple fluid within the prevertebral space (Panel D, arrow).

Acute calcific tendinitis of the longus colli muscle was diagnosed. An oral non-steroidal anti-inflammatory was started and symptoms resolved within 10 days. Acute calcific tendinitis of the longus colli muscle results from aseptic inflammation of the longus colli muscle in the cervical prevertebral space, due to calcium hydroxyapatite crystal deposition. It is benign and self-limiting and presents classically with acute severe neck pain, neck stiffness and odynophagia. Inflammatory markers may be raised. Diagnosis may be made on imaging, with CT being the gold standard, showing pre-vertebral soft tissue swelling and amorphous calcification in the longus colli muscle anterior to C1–C2. Treatment is usually with non-steroidal anti-inflammatory medications, with symptoms generally resolving within 1–2 weeks.
Figure 1:

Panel A, lateral radiograph showing calcification anterior to C2 (arrow) with prevertebral soft tissue swelling.
Panels B and C, CT in bone windows showing amorphous calcification within the left longus colli muscle anterior to the C2 vertebral body (arrow).
Panel D, CT in soft tissue window showing simple fluid in the prevertebral space anterior to the C2 vertebral body (arrow).
REFERENCES:

