Benign febrile cervicalgia due to calcific retropharyngeal tendinitis: Case study

S. Queinnec, D. Petrover, P. Guiguia, B. Ilharrebordea

INTRODUCTION

Periarticular calcification in the shoulder, hip and elbow has been fully described and categorized as calcific tendinopathy. Similar retropharyngeal but prevertebral calcification has also been reported by ENT specialists and radiologists [1–3]. Calcific retropharyngeal tendinitis, however, has so far never been described in the French-language orthopedic literature. It is considered rare in the literature, but the frequency is not known with precision. It is generally asymptomatic, but can manifest as febrile cervicalgia, sometimes with postoperative onset, which can mislead diagnosis.

We here report a case of calcific retropharyngeal tendinitis following lumbar discectomy.

OBSERVATION

This 56-year-old man had undergone L4-L5 lumbar discectomy for discal hernia. He complained of sudden neck pain 36 hours postoperatively, with associated odynophagia and reduced cervical spine mobility. On admission, his temperature was 38.3 °C. The surgical scar was clean, non-inflamed and painless on palpation, which ruled out cicatricial abscess. Neurological examination was normal. There was an inflammatory syndrome on biological analy-

KEYWORDS

Spine; Retropharyngeal calcific tendinitis; Prevertebral space
s, with elevated C-reactive protein (CRP) at 46 mg/L and erythrocyte sedimentation rate (ESR) of 41 mm/hr at hour one.

Given this aspect of febrile cervicalgia, we considered a diagnosis of infectious cervical spondylodiscitis. Emergency magnetic resonance imaging (MRI), however, failed to confirm this diagnosis, revealing none of the classic signs of spondylodiscitis: T1 hyposignal and T2 hypersignal of disc and adjacent vertebral plates (Fig. 1). There was no intracanal abnormality. Prevertebral T2 hypersignal was seen in the longus colli, indicating a liquid effusion (Fig. 2). These images suggested calcific retropharyngeal tendinitis. Non-steroid anti-inflammatory treatment was delivered intravenously for the first 48 hours and then per os for a total of two weeks.

Evolution quickly became favorable, with complete resolution of pain and apyrexia and normalization of biological factors within 48 hours. Clinical examination at last follow-up (24 months) found no abnormality or functional complaint.

**Discussion**

This is an original case, presenting a rare pathology, little known in orthopedics, but simple to treat. An initial diagnos-
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Imaging is the essential means of establishing diagnosis, by precise radiological description [2,7,8]. Firstly, lateral cervical spine X-ray reveals tumefaction of the prevertebral soft parts, from C1 to C4. Calcifications are pathognomonic, but cannot always be seen on standard lateral views without benefit of hindsight. In the present case, initial cervical spine X-ray views were lacking, and the clinical suggestion of infectious spondylodiscitis led to performing MRI [6]. CT or MRI reveals retraction of prevertebral soft tissue and of the pharyngeal lumen. CT has better resolution for identifying prevertebral calcification (Fig. 3). Calcification generally extends from C1 to C3, although one case was described with calcification facing the C5-C6 disc [8]. MRI shows hypersignal on T2-weighted sequences for the C1-C4 prevertebral muscles. Gadolinium injection confirms diagnosis, revealing prevertebral liquid effusion.

The main differential diagnosis in imaging is with odontoid articular chondrocalcinosis with its typical "crowned

Figure 3  Sagittal bone-window CT slice: prevertebral calcification, showing calcification facing C2.

Figure 4  Transverse (a) and frontal (b) CT slices: odontoid chondrocalcinosis, with typical crowned tooth aspect.

Figure 5  Contrast-enhanced sagittal CT slice: C3, C4 and C5 spondylodiscitis with voluminous prespinal effusion from C2 to C5 and C3-C5 epiduritis. The effusion is hypodense, with peripheral uptake.
tooth’’ aspect (Fig. 4), but which generally occurs in older patients. Presence of a supernumerary bone may also be suggested, but is a diagnosis of exclusion.

The main differential diagnoses given an aspect of ‘‘febrile angina’’ are spondylodiscitis, cellulitis or retropharyngeal abscess. MRI may be misleading, as calcification may be mistaken for a tiny abscess, but can rule out spondylodiscitis in case of a normal aspect in plates and discs. CT can also confirm the absence of vertebral plate pathology, and contrast injection may find no peripheral heightening, as would be typical in case of organized abscess (Fig. 5).

The suggestion of infectious diagnosis may lead to fruitless aggressive procedures, such as puncture or surgical biopsy [2,5]. In the present case, imaging enabled any such procedure to be avoided.

Treatment of calcific tendinitis is based upon non-steroid anti-inflammatory medication. Evolution quickly becomes favorable, with symptoms diminishing with two or three days and resolving within one or two weeks [1,2,5]. Intravenous corticotherapy is not necessary. One single case of recurrence has been reported [5,9].

Conclusion

The diagnosis of calcific retropharyngeal tendinitis needs to be known, and considered in case of postoperative or de novo cervicalgia with or without fever, associated with odynophagia. Imaging is pathognomonic and should enable diagnosis, thereby avoiding aggressive initial management of suspected cervical infection.

Disclosure of interest

The authors declare that they have no conflicts on interest concerning this article.

References