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Longus colli kasının kalsifik tendiniti

Calcific tendinitis of longus colli muscle

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Abstract

Longus colli kalsifik tendiniti inflamatuar bir süreç olup longis kolli kasının süperior oblik kasında kalsiyum hidroksiapatit kristallerinin birikmesi sonucu oluşur. Retrofarengeal kalsifik tendinit veya akut kalsifik prevertebral tendinit olarak ta adlandırılır. Boyun ağrısının nadir bir nedeni olup klinik olarak disfaji,odinofaji ve bazen hafif ateş ile seyredebilir. Labaratuar bulgusu olarak hafif lökosit ve sedimentasyon artışı olabilir. Tanısı radyolojik olarak anterior C1- C2 vertebrada kalsifikasyonun görülmesi ve prevertebral yumuşak doku şişliğinin gösterilmesi ile konulur.

Biz boyun fıtığı nedeniyle opere olan hastada boyun ağrısı ve disfaji şikayeti ile başvuran longus colli kalsifik tendinitli hastayı sunacağız.

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Key words: Calcific tendinitis, longus colli muscle, dysphagia

Özet

Calcific tendinitis of the longus colli muscle is an inflammatory process resulting from the deposition of calcium hydroxyapatite crystals in the superior oblique muscle of the longus colli muscle. This is also referred to as retropharyngeal calcific tendinitis or acute calcific prevertebral tendinitis. It is a rare cause of neck pain, and may be clinically accompanied by dysphagia, odynophagia and occasionally slight fever. Laboratory findings may include slightly increased leukocyte count and sedimentation. It is diagnosed with radiologic imaging of calcification in the anterior vertebrae (C1-C2), and prevertebral soft tissue swelling.

We shall be presenting a case report of a patient with calcific tendinitis of the longus colli muscle admitted with complaints of neck pain and dysphagia, and operated due to cervical disc herniation.

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Anahtar sözcükler: Kalsifik tendinit, longus colli kası, disfaji

Introduction

Calcific tendinitis of the longus colli muscle is an inflammatory process resulting from the deposition of calcium hydroxyapatite crystals in the superior oblique muscle of the longus colli muscle. This is also referred to as retropharyngeal calcific tendinitis or acute calcific prevertebral tendinitis [1]. It is a rare cause of neck pain, and may be clinically accompanied by dysphagia, odynophagia and occasionally slight fever [2]. Laboratory findings may include slightly increased leukocyte count and sedimentation [3]. It is diagnosed with radiologic imaging of calcification in the anterior vertebrae (C1-C2), and prevertebral soft tissue swelling [4].

Case

A40-year old male patient was admitted to our clinic with neck pain and swallowing difficulties. The patient was employed as a teacher. On physical examination, there were mild pain and spasm in the paravertebral muscleson her neck. Additionally, neck movement was slightly restricted. Neurological examination shows no deficit. Fever, nausea and vomiting were never reported. The oropharyngeal examination was normal. When we asked about the patient's history, we found out that he had undergone a discectomy and anterior fusion operation due to cervical disc herniation two years ago. There was no family history of this illness. The following laboratory findings were noted: White blood cell (wbc):7900 mcL, sedimentation 12

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mm/h, C reactive protein (Crp): 3.2 mg/L. The Magnetic Resonance Imaging (MRI) shows prevertebral soft tissue inflamation that extends from nasopharynx, through the anterior arch of the atlas down to the C5-6 level (Figure 1). At the level of anterior atlantoaxial joint, in the right side of the soft tissue inflamation, small hypointense calcific deposits were detected. These calcifications at insertion side of longus colli muscle were also confirmed by CT(Computed tomography) examination (Figure 2). The operation side, C5-6 intervertebral anterior instrumentation level showed no abnormalition both MRI and CT examination. We prescribed non-steroidal anti-inflammatory agent and neck exercise for treatment. Pain and disphagia was resolved after 10 days.

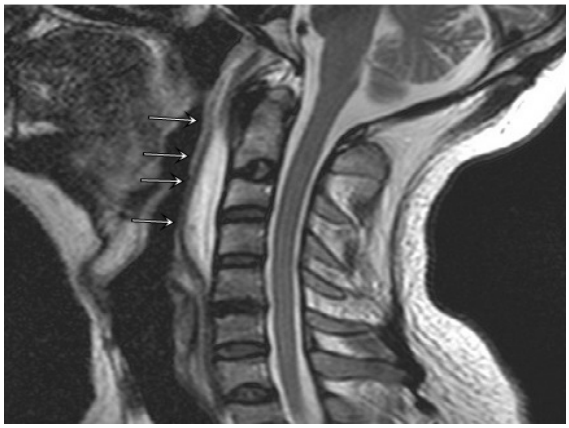

Figure 1a. Sagittal T2 weighted image shows high signal prevertebral soft tissue inflamation that extends down to the C6 vertebra level.

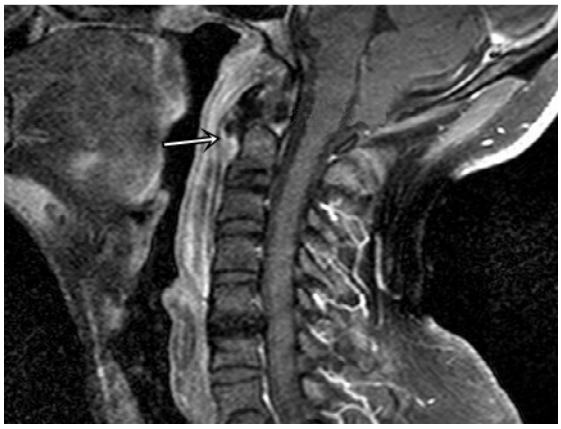

Figure 1b. Strong contrast enhancement is seen on contrast enhanced fat-saturated T1 weighted sagittal image, compatible with soft tissue inflamation. Note also small hypointense calcific deposit near to inferior side of anterior arch of atlas (arrow)

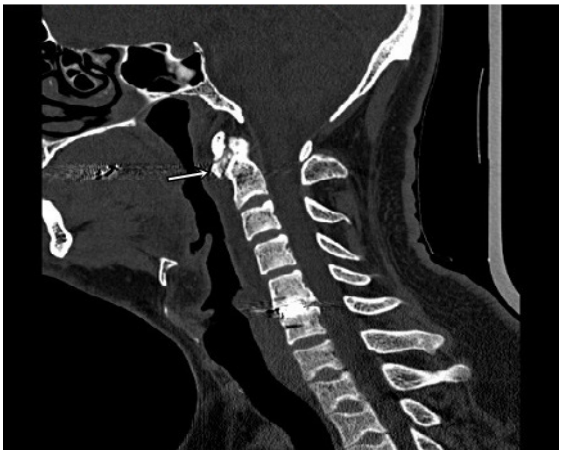

Figure 2a. Sagittal CT image confirm the small calcific deposit at proximal insertion of longus colli muscle.

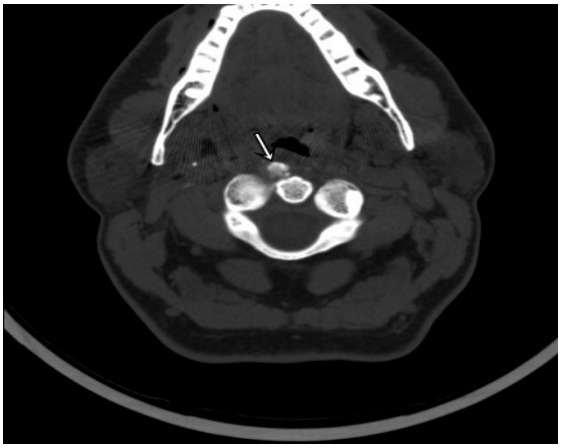

Figure 2b. Axial CT image. Calcification and surrounding soft tissue swelling causes marked impression of nasopharyngeal space.

Discussion

Although the cause of accumulation of calcium apatite crystals is not fully elucidated, repetative traumas, injuries, tissue necrosis and ischemia can be considered in etiyology [5]. In our case, discectomy + anterior instrumentation operation may have caused this condition. The longus colli muscle consists of 3 portions: superior oblique, inferior oblique, and vertical. Classically, the calcification affects the superior oblique portion of the longus colli muscle at the C1-C2 level [6]. An inflammatory process begins as a result of hydroxyapatite crystals rupturing, then; effusion forms on the retropharyngeal space around the muscle [7]. The effusion was seen at the C1-C2 level with MRI. The effusion was considered a complication of the surgery. Instrumentation shifts or any additional problems were not considered as a result of a neurosurgery consultation.

WBC and CRP are more elevated in retropharyngeal infections, especially in cases of lymphadenitis, the amount of fluid is observed in large quantities with intravenous contrast-enhanced CT [2]. Extradural hemorrhage, cervical osteomyelitis, or meningitis are emergency conditions that should be considered on differantial diagnosis [8]. Calcific tendinitis of the longus colli muscle is generally a self-limiting condition that resolves spontaneously. Anti-inflammatory drugs or other analgesics may be prescribed in the treatment. Excessive neck motions and surgical drainage should be avoided [9].

Although calcific tendinitis of the longus colli muscle is a rare illness, it should be considered in patients presenting with symptoms such as severe neck pain, dysphagia and odynophagia after the neck operation. Following the differential diagnosis with similiar disease, it can be fully recognized by radiology techniques such as CT and MR.

Conflict of interest: All authors declared that there is no conflict of interest.

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