
Calcification of the jaw ligament

IMAGES IN MEDICINE

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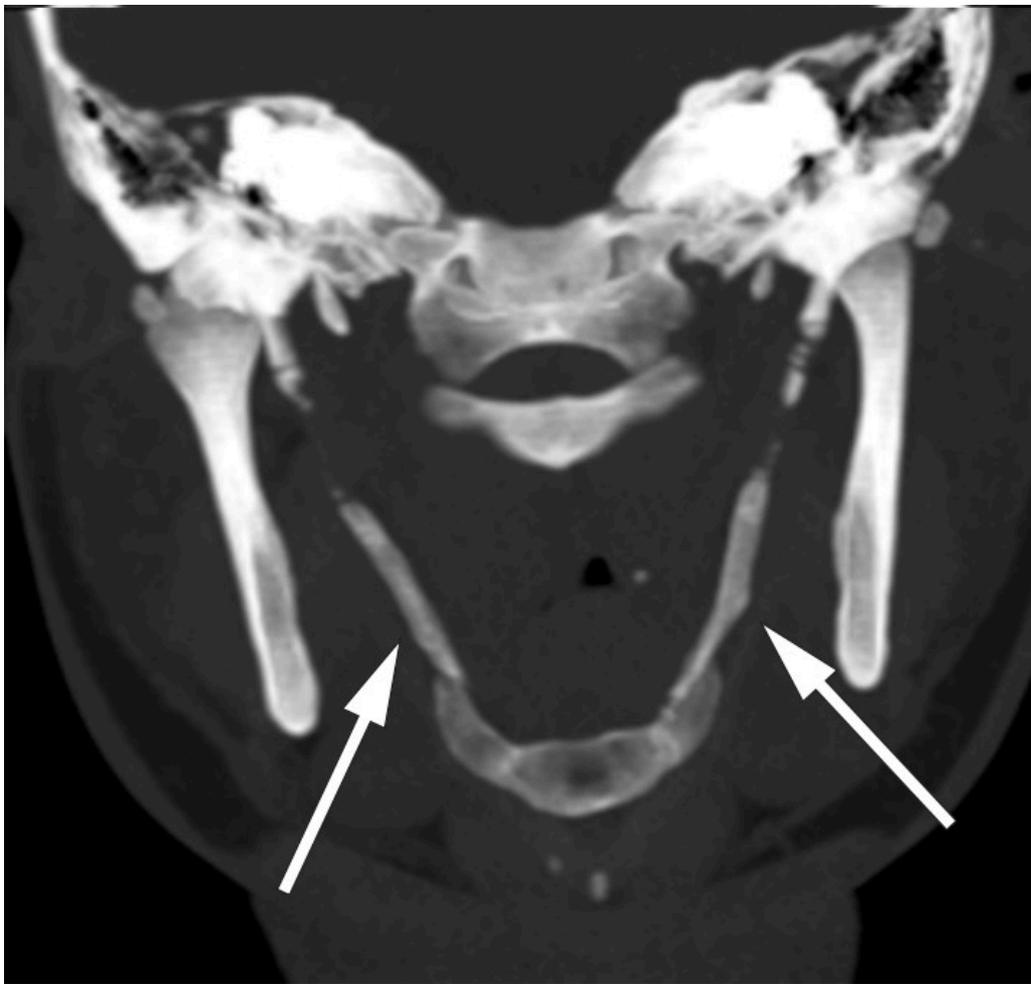
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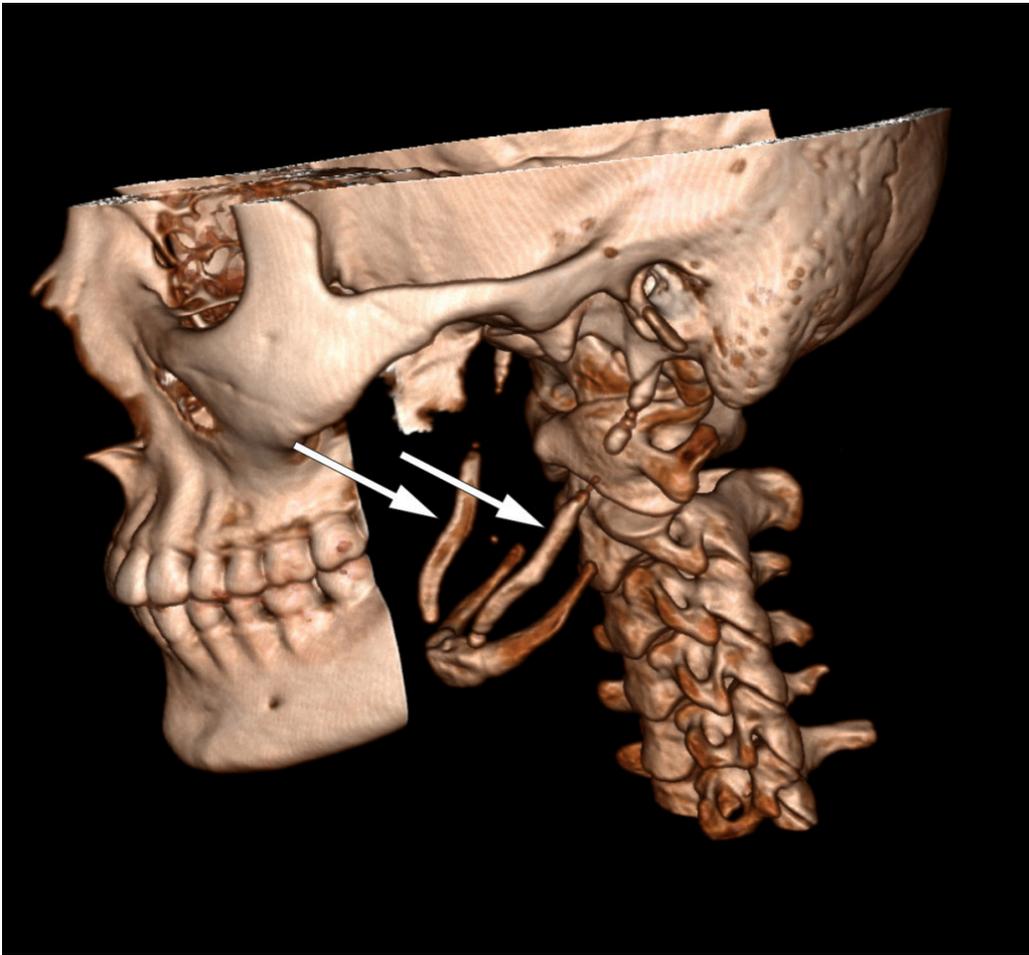
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Eagle syndrome, also known as stylalgia, is a rare pain syndrome associated with an elongated styloid process or calcified stylohyoid ligament.



A previously healthy woman in her thirties developed a paroxysmal, painful and spasmodic sensation in the left side of her neck, throat and face with accompanying global headache and ipsilateral tinnitus. She also had pain and numbness in the ipsilateral half of the tongue, but no hearing loss, dysphagia or dysphonia. Her symptoms first appeared following repetitive weightlifting.



The symptoms were triggered and exacerbated by leaning or rotating the head to the right. The patient reported having experienced a similar, transient episode two years earlier. There was no history of head or neck trauma. Clinical examination was normal, apart from soreness upon palpitation of the peritonsillar region and the left side of the neck. A comprehensive work-up with neurophysiological testing, imaging and an otorhinolaryngological examination revealed normal findings. A CT scan of the neck revealed bilateral calcification of the stylohyoid ligaments (see arrows), which could explain the patient's symptoms.

Eagle syndrome is classified as either acquired or congenital, but the aetiology remains unclear. The styloid process is elongated (> 30 mm) in approximately 4 % of the population. The prevalence varies somewhat, however, and only a small minority (1–5 %) of affected individuals develop symptoms that may be related to the abnormality [\(1\)](#).

The condition often presents with unilateral orofacial-cervical pain and dysphagia. Symptoms are due to compression of nearby structures such as the chorda tympani, auriculotemporal nerve, lingual nerve, glossopharyngeal nerve and hypoglossal nerve. Rarely, the styloid process may compress the internal carotid artery and lead to neurological symptoms such as dizziness and a transient ischaemic attack. The condition can also lead to carotid artery dissection and Horner's syndrome [\(1\)](#), but this is very rare. A CT scan is the gold standard in terms of diagnostics [\(1\)](#). Relevant differential diagnoses are temporomandibular disorder, pain in the wisdom teeth, glossopharyngeal and trigeminal neuralgia, migraine, cervical osteoarthritis, hyoid bursitis, temporal arteritis, cluster headache, myofascial pain syndrome, parapharyngeal space lesions, and sequelae after tonsillectomy.

Treatment is either conservative with medications (NSAIDs, anti-epileptic drugs and/or antidepressants), as chosen for our patient, or surgery for refractory cases. The syndrome should always be considered in patients with chronic orofacial pain that is refractory to conventional treatment.

The patient has consented to the publication of this article.

LITERATURE

1. Badhey A, Jategaonkar A, Anglin Kovacs AJ et al. Eagle syndrome: A comprehensive review. *Clin Neurol Neurosurg* 2017; 159: 34 - 8. [PubMed] [CrossRef]
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