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Eagle's syndrome. About a case

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ABSTRACT

Eagle syndrome or pen-carotid syndrome is a clinical and radiological entity characterized by ossification of the stylohyoid ligament which may manifest itself by clinical signs related to the compression of vasculo-nervous structures. This syndrome was first described by Eagle in 1937. Its frequency is estimated at 4% of the general population, and only 4% of its ossifications are symptomatic [1]. The functional signs are variable, Eagle distinguished three groups, the first is that of the classic syndrome associating neck pain, earache and pharyngeal discomfort, the second characterized by pain along the external carotid and the third asymptomatic. Palpation of the tonsillar dimples suggests the diagnosis. Standard x-rays usually confirm this, but it is mainly CT that allows us to properly explore the calcified ligament and its relationships. The treatment is surgical, based on the excision of the calcified process and the release of the compressed vasculo-nervous structures.

INTRODUCTION

Patient and observation:

We report the case of a young patient aged 24, referred to the radiology department for the assessment of bilateral lateral cervical pain evolving for two and a half years plus a mark on the right of progressive, intermittent installation caused by swallowing and mobilization. cervical including rotational movements.

No particular entecedant was noted in the patient and the clinical examination was unremarkable.

A cervico-facial CT scan was carried out (fig. 1) demonstrated the presence of bilateral bone processes extending from the styloid process towards the hyoid bone, testifying to an ossification of the styloidal ligaments, without any other associated anomaly, in particular. in the temporomandibular joints, which made it possible to make the diagnosis of Eagle syndrome.

RESULTS AND DISCUSSION

Discussion:

The stylecarotid syndrome was described in 1870 [1] by Lucke after Marchetti had described in

1652 [2] an asymptomatic ossification of the stylhyoid ligament.

Weinlecher 1872 [2] described the first surgical resection of the ossified stylhyoid ligament in a symptomatic patient.

According to the literature, the frequency of Eagle's syndrome is 4% of the general population and only 4% of these ossifications are clinically symptomatic [1].

This syndrome is frequently observed in young adults between the ages of 20 and 40, with a clear predominance of women, and the condition is often bilateral [2]. Most authors claim that this syndrome follows trauma or surgery near the styloid process, such as tonsillectomy or dental surgery [2].

Clinically, Eagle's syndrome is characterized by great semiological variability, which makes it impossible to identify a characteristic clinical picture. Eagle distinguished three groups [4]. The first is that of the "classic syndrome" associating pharyngeal discomfort, neck pain, earache, a sensation of a foreign body in the throat, dysphagia, taste distortion as well as odynophagia. The second group is characterized by a symptomatology dominated by pain along the path of the external carotid artery, hence its name "external carotid syndrome". The third group is that of the fortuitous discovery of an ossification of the stylohyoid ligament on an X-ray of the cervical spine or on a panoramic X-ray in a clinically asymptomatic patient.

Standard x-ray examination usually confirms the suspected clinically diagnosis, showing a lateral x-ray of the cervical spine as a bilateral bony process with pseudo-joints extending from the styloid process to the lesser horn of the hyoid bone. Axial CT [3], showing bilateral ossification of the stylohyoid ligament and its intimate relationship with the external carotid artery. It makes it easy to explore the calcified ligament over its entire length and its relationship to neighboring vascular and nerve structures.

Doppler-coupled ultrasound can authenticate calcification of the stylohyoid ligament and show signs of compression of the vessels in the neck [6].

Multi-planar MRI represents an examination of choice mainly in cases of vasculo-nervous conflict. However, this examination is little prescribed because it is expensive and often unnecessary when standard x-rays and the scanner are sufficient for the diagnosis.

The differential diagnosis arises with trigeminal neuralgia, temporomandibular pathology, ill-adapted dental prostheses and a tumor of the upper aerodigestive tract [5]. Clinical examination makes it possible to rule out the first 3 diagnoses and endoscopy allows to rule out an upper airway tumor.

The treatment is surgical, based on the resection of the calcified process and the release of the compressed vascular structures. This resection is performed either endo-buccally or externally [7]. The operative consequences are generally simple marked by the sedation of the symptoms. Local treatment with corticosteroid injections may be initiated in patients with little clinical discomfort or who refuse the operation [8]

CONCLUSION

Eagle syndrome is an entity that is still underestimated and unrecognized by clinicians despite its frequency. In fact, simple palpation of the tonsillar dimples and careful analysis of cervical spine x-rays and / or panoramic x-rays can suggest the diagnosis.

Conflicts of interest :

The authors declare no conflict of interest

Contributions from the authors:

All the authors contributed to the conduct of this research work. The authors have read and approved the final version of the manuscript.

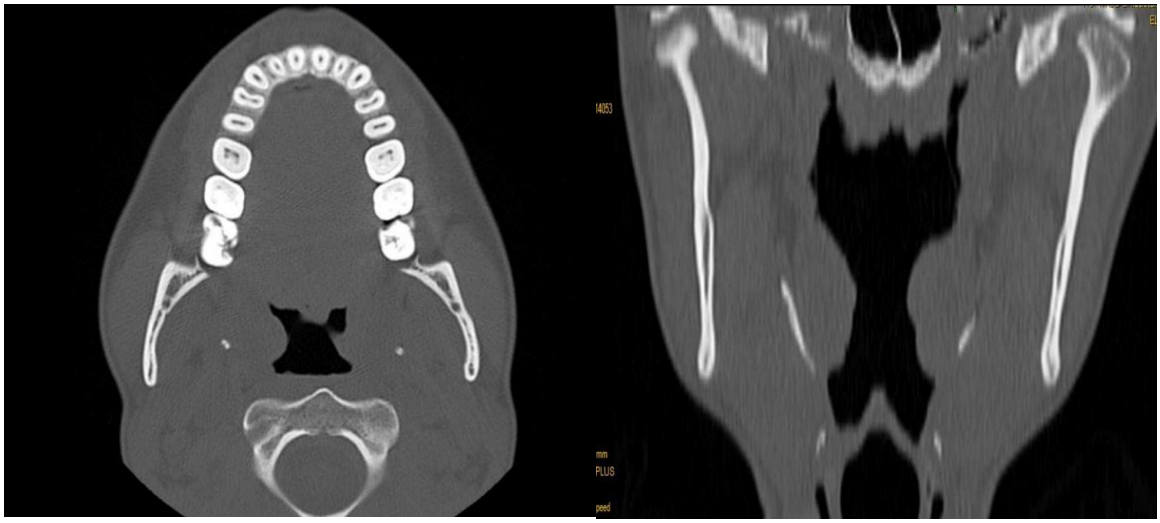

Figure 1 :CT in axial and coronal section in bone window: ossification of the stylohyoid ligament.

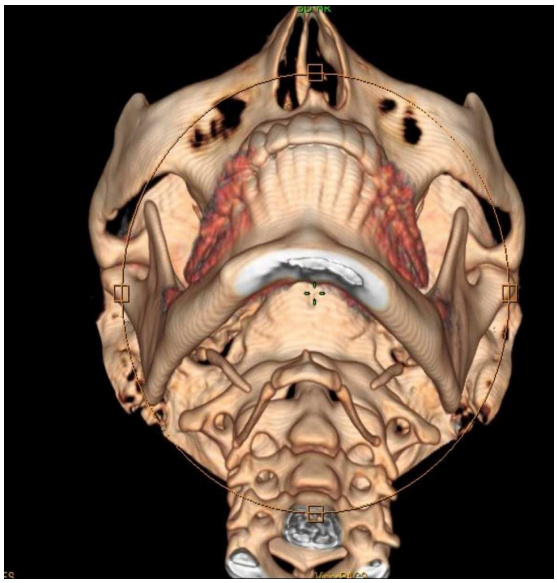

Figure 2 : Reconstruction VR en coronal.

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