



STYLALGIA BILATERAL: A CASE REPORT

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Introduction

Calcified stylohyoid ligament may presents in the form of recurrent throat pain unilateral or bilateral, foreign body sensation or sometimes dysphagia and rarely referred otalgia. In adults the styloid process is approximately 2.5 cm in length, in our case it was nearly 4 to 5cm in length with its tip just lateral to tonsil in tonsillar bed area.

Case report

During the routine examination of Ear, Nose and Throat in out patient department of Rural Hospital and Medical College Loni, WE found an adult lady complaining of bilateral pharyngeal pain, which was dull aching, continuous, aggravating during swallowing and occasionally referring to ears. On oropharyngeal examination by palpation, we got bilateral firm to hard projecting tips lateral to tonsil. X-ray was suggesting elongation of both styloid processes.

Discussion:

The styloid process is a slender, elongated, cylindrical bony projection that lies anteromedial to the mastoid process. It normally varies in length from 2cm to 3cm, and a styloid process longer than 3cm is found in 4 to 7% of the population. The styloid process has attachment to three muscles and two ligaments [2]. The stylopharyngeus, stylohyoid and styloglossus muscles originate here. The facial nerve emerges from the stylomastoid foramen posteriorly. The stylohyoid ligament extends from the styloid process to the lesser horn of the hyoid bone.

The styloid process, stylohyoid ligament and lesser horn of the hyoid bone are derived from Reichert's cartilage, which arises from the second branchial arch. The cause of elongation of the styloid process has not been fully elucidated. Several theories have been proposed.

- 1) Congenital elongation of the process due to persistence of a cartilaginous anlage in the stylohyale.
- 2) Calcification of the styloid ligament giving the appearance of an elongated styloid process.
- 3) Growth of osseous tissue at the insertion of the stylohyoid ligament[3]

The third theory is based on histological evidence of metaplastic changes to the subperiosteal cells in the vicinity of the ligaments insertion. Regardless of the pathophysiology of elongation, the result is a rigid, abnormally long structure that can cause pain or discomfort by one or several mechanisms.

Elongated styloid process or calcified stylohyoid ligament can cause recurrent throat pain along with foreign body sensation, dysphagia or facial pain .Elongated styloid process is a diagnosis that should be considered in the evaluation of recurrent neck, throat or facial pain and dysphagia.

Additional symptoms may include neck or throat pain with radiation to the ipsilateral ear .In adults the styloid process is approximately 2-3 cms in length and its tip is located between external and internal carotid arteries just lateral to tonsillar fossa. It may develop inflammatory changes or impinge on the adjacent arteries, on sensory nerve endings leading to the symptoms described. Diagnosis can usually be made on physical examination by digital palpation of the styloid process in the tonsillar fossa which exacerbates the pain .In addition relief of symptoms with injection of anesthetic solution into the tonsillar fossa is highly suggestive of this diagnosis. Radiographic workup should include anteroposterior and lateral skull films. The treatment of Eagle's syndrome is primarily surgical. The styloid process can be shortened through an intraoral or external approach [4].

The first report of the anatomic pathology was by Marchetti of Padua who described the ossification of the stylohyoid ligament.

The pain syndrome was recognized by Weinlecher, surgically excise the styloid process to treat a symptomatic patient.

Other isolated cases were reported until Eagle described the syndrome in 1937. Eagle divided the syndrome into two categories. He described the classic syndrome as persistent pain in the pharynx, aggravated by swallowing with the pain frequently referred to the ear on the side of the elongated styloid process. He also noted increased salivation, hesitancy, and difficulty in swallowing, gagging and a foreign body sensation [5, 6].

Fritz reported that only 11 of 43 patients with the syndrome in his series have had tonsillectomy. Both Eagle and Fritz reported that their patients were completely relieved of symptoms by the intraoral shortening of the styloid process [7].

Harma noted that bilateral elongation occurred in 50% of the patients but only half of them had bilateral symptoms [8].

Steinman reported the syndrome in 30 patients, 26 of whom did not have an elongated styloid process [9].

Keur et al. assessed 1135 edentulous patients clinically and radio graphically to determine the relationship between the elongated styloid process and four symptoms frequently encountered in patients with Eagle's syndrome [10].

We treated this case surgically, as tonsillectomy first followed by excision of bilateral elongated calcified styloid processes, postoperative period was uneventful.

Conclusion:

Stylalgia being the unusual presentation, it is mostly under diagnosed. A thorough history, clinical and radiological examination will reveal the condition. A proper diagnosis at earliest by specialist would reduce the cost burden of modern modality of treatment.



X-ray showing bilateral elongated styloid process



Intra-op picture showing exposed elongated styloid process



Fig showing excised specimen

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