Original Research Paper



ENT

EAGLE'S SYNDROME : CASE SERIES

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Eagle's syndrome is the elongated styloid process which is a rare clinical entity. It is seen in 4% of general population, of which only 4% are symptomatic. Aim of this study is to diagnose the Eagle's syndrome, taking up them for surgery and follow up for post operative condition. Our study includes 5 patients for 1 year period [2022-2023] who presented to ENT OPD complaining of recurrent throat pain ,referred otalgia, foreign body sensation. Most of the patients are female, between 20-45 years of age, and presented with unilateral disease. A CT 3D facial bones was done and the diagnosis was made. The patients were initially conservatively treated, but presented again with persistent symptoms. So they were taken up for surgery. Post operative course was uneventful.

KEYWORDS: Eagles syndrome, elongated styloid process.

INTRODUCTION:

Eagle's syndrome is caused by an elongated styloid process and is an uncommon and under diagnosed clinical condition. Normal length of styloid process is 2.5-3 cm. this condition was first reported by WATT EAGLE in 1937.

Embyologically styloid process arises from second branchial arch. Styloid process is an slender outgrowth at the base of temporal bone located posterior to the mastoid apex. Elongated styloid process causes irritation of nerve plexus around the carotid vessel. Impingement of styloid process affect the glossopharyngeal nerve, trigeminal nerve and cervical sympathetic plexus. Eagle's syndrome may also be due to calcified stylohyoid ligament.

Eagle described this clinical entity as a syndrome complex mainly in two varieties.

Classical variety presents as vague recurrent throat pain, referred otalgia, foreign body sensation in throat. Second variety presenting as carotidynia, headache and dizziness.

Cause of elongated styloid process is not well understood but several theories have been put forward most popular one is growth of osseous tissue along the stylohyoid ligament. Diagnosis can be made by clinical and radiological examination. 3d-CT facial bone is the gold standard investigation.

Treatment methods includes medical and surgical management.

AIMS AND OBJECTIVES:

- To study Eagle's syndrome and its clinical features in association with age, gender, laterality, treatment protocol.
- To assess the post operative outcome.

METHODOLOGY:

Our study includes, a prospective study from 2022 -2023, that included 5 patients who presented to the ENT OPD with variable complaints like recurrent throat pain, referred otalgia, foreign body sensation in the throat, who underwent a thorough physical examination and work up to make the diagnosis of Eagle syndrome.

RESULTS AND DISCUSSION:

Among 5 patients, 3 patients presented with recurrent throat pain as the commonest complaint, which was copmparable to other studies. The next common symptom was body sensation and the other 2 presented with foreign body sensation in the throat as the common complaint. Mean age of presentation is 34.4. 4 were females and 1 male, 4 patients presented with unilateral throat pain and 1 presented with bilateral throat pain. All the 5 were taken up for the surgery.

On clinical examination there were no symptoms suggestive of pharyngitis or tonsillitis. On palpation of tonsillar fossa, there felt blunt bony elevation. Patients were further evaluated by taking orthopantomogram, 3d-CT facial bones which were suggestive of elongated styloid process. Medical management started for all the 5 patients but the symptoms were not relieved. So all the 5 patients were taken up for styloidectomy.

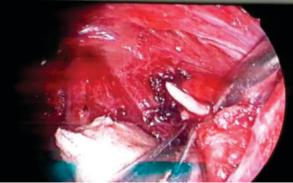
Approach for the surgery used is trans oral trans tonsillar approach. After proceeding with tonsillectomy separation of superior constrictor muscles to expose the styloid process, and the excision of styloid process was done. Patients were asymptomatic on further follow up.

CONCLUSION:

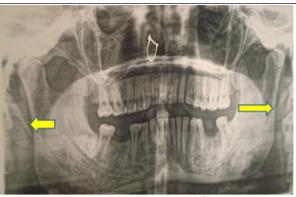
Eagle's syndrome is most common in women between 20-45 years of age, most common unilateral presentation, with common complaint as vague recurrent throat pain. All the 5 patients were asymptomatic on further follow up.



CT 3D facial bones showing elongated styloid process - white arrow



Intra operative image of elongated styloid process



Orthopantomogram showing elongated styloid process

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