

Eagle Syndrome: A Case Report

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ABSTRACT

Introduction: Eagle's syndrome also known as elongated stylohyoid syndrome is a rare condition in which recurrent sharp facial pain, throat pain, and dysphagia which is caused by an elongated calcified styloid process.

Case report: A 57-year-old female presented with left-sided facial pain, throat pain, and dysphagia which as not relieved by medications. The patient was diagnosed with a left elongated styloid process with glossopharyngeal neuralgia. She underwent tonsillectomy with surgical shortening of the styloid process. Here, we discuss the presentation and management of the condition.

Conclusion: The only definitive treatment for Eagle's syndrome is surgical correction.

Keywords: Facial Pain, Neuralgia, Dysphagia, Tonsillectomy

INTRODUCTION

Eagle syndrome, also known as elongated styloid process, is a condition first described by Watt Eagle in 1937. It is characterized by recurrent throat pain, foreign body sensation, dysphagia, or facial pain due to a calcified stylohyoid ligament or elongated styloid process. The spectrum of symptoms is sometimes variable and often becomes challenging to diagnose clinically attributing to a wide variety of facial neuralgias. In this case report, we discuss a case of Eagle syndrome exhibiting unilateral episodic symptoms not relieved by medications.

CASE REPORT

A 57-year-old female presented in April 2019 with complaints of pain over the inner left side of the throat for 1 month. The pain was described as excruciating and sharp in character, comes in episodes without radiation. The pain was aggravated on swallowing and there were no alleviating factors. She described the pain scale to be seven on ten in severity. The patient had no previous episodes of similar pain in the past. There was no history of vertigo, tinnitus, otorrhea, otalgia, changes in voice, constitutional symptoms, and dental problems. She also gave a history of tooth extraction 8 months ago.

On examination, Patient was moderately built and nourished with vital signs within normal limits. Extraoral examination showed mild to moderate edema over the left pre and post auricular region with diffuse swelling extending superiorly to the left tragus area and inferiorly about one centimeter below the lower angle of the left mandibular region. On palpation, tenderness was noticed over the left postauricular and the left angle of mandible. Swelling was soft in consistency. No gross facial asymmetry noted. During intraoral examination, the patient was able to open the mouth adequately with no

tenderness over the buccal, lingual, and vestibular region. Tongue movement and dental hygiene were within normal limits. Examination of ears, nose and paranasal sinuses did not reveal any abnormality.

High contrast computed tomography (HRCT) was performed which revealed a left elongated styloid process. Magnetic resonance imaging (MRI) of the head and relevant Lab investigations did not show any significant abnormalities.

The patient underwent bilateral tonsillectomy with excision of the left elongated styloid process under general anesthesia. Post Op period was uneventful. She then underwent a pure-tone auditory test (PTA) and tone decay test (TDT) which were normal according to her age. She was discharged after 3 days.

DISCUSSION

Elongation of the styloid process is a rare condition that affects about 4 to 7 percent of the population. It is often unilateral, but many bilateral cases have also been identified, although bilateral symptoms are rare. The pathogenesis of the styloid process is unclear and not many studies in the past have been done on this rare disorder. Many mechanisms have been postulated before. One of the explanations previously has been discussed include congenital elongation of the stylohyoid ligament followed by calcification with the growth of the osseous tissue around its insertion.

Due to its variable presentation, this disorder is often missed by physicians. Some of the conditions with similar presenting symptoms include temporomandibular joint disease, chronic pharyngotonsillitis, neuralgias, and tumors. A physician needs to take a detailed history and clinical examination to aid in diagnosing Eagle syndrome. It should be possible to feel an elongated styloid process by careful intraoral palpation, placing the index finger in the tonsillar fossa, and applying gentle pressure. An early radiological investigation has shown early diagnosis and management. High contrast CT is considered to be the gold standard.

According to the current literature, the only definitive treatment for Eagle syndrome is surgical excision or shortening of the styloid process. An intraoral approach is

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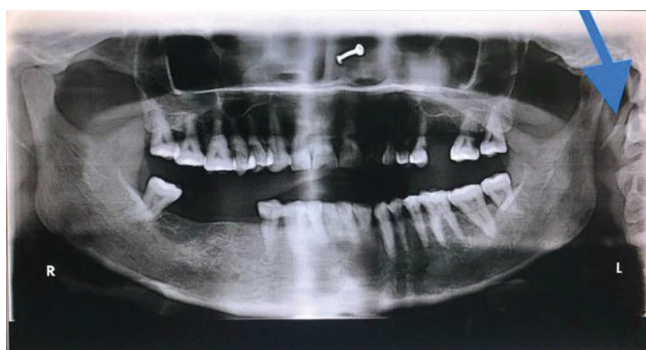


Figure-1: Computed tomography showing elongated left stylohyoid process

less time consuming under, possibly, local anesthesia, with no visible scar as compared to the extraoral approach. On the other hand, the external approach leads to more successful outcomes. Preference depends on the operating surgeon.

CONCLUSION

Eagle syndrome is a rare condition that often presents with a wide range of presentations. Early diagnosis and management are achieved by careful history and physical examination with possible early radiological intervention. Surgery is the only definitive treatment done which is mostly done by an intraoral or extraoral approach.

REFERENCES:

1. Ansari, S. H., A. Nilakantan, and A. Dutta. Elongated styloid process syndrome (Eagle's Syndrome). *Medical Journal Armed Forces India* 1994;50:301-302.
2. Orhan, Kadir Serkan, et al. Elongated styloid process (Eagle's syndrome): literature review and a case report. *Agri: Agri (Algoloji) Derneği'nin Yayın Organidir= The journal of the Turkish Society of Algology* 2005;17: 23-25.
3. Pinheiro, Thais Gonçalves, et al. Eagle's syndrome. *International archives of otorhinolaryngology* 2013;17: 347-350.
4. Saccomanno S, Greco F, DE Corso E, et al. Eagle's Syndrome, from clinical presentation to diagnosis and surgical treatment: a case report. *Acta Otorhinolaryngol Ital.* 2018;38:166-169.
5. Ceylan, A., Köybaşıoğlu, A., Çelenk, F., Yılmaz, O., & Uslu, S. Surgical treatment of elongated styloid process: experience of 61 cases. *Skull base* 2008;18: 289-295.

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