Intra-Oral Approach For Eagle Syndrome (Case Report)

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ABSTRACT

Eagle syndrome occur due to calcification of the stylohyoid ligament or elongation of styloid process, which then produce a pain in the jaw, back of throat, base of the tongue, ears, neck and face as well as difficulty swallowing and sensation of having a foreign object in the throat. Classic eagle syndrome is present on only one side; however, it may be present on both sides.

Keywords
Stylohyoid ligament, Styloid process, Eagle syndrome.

Introduction
Eagle syndrome is characterized by cirevicopharyngeal sings and symptoms associated with elongation of styloid process or ossification of stylohyoid ligament [1,2].

The cause of the elongation has not been known clearly, it could occur spontaneously or could arise since birth [3], usually normal stylohyoid process is 2.5-3 cm in length, if the length is longer than 3 cm, it is classified as an elongated process [4,5].

Herein, we present an important case of eagle syndrome.

Case Report
A 36-year-old male presented with 8 months history of pain in the throat radiating to head and neck with otalgia and buzzing sensation on the left side.

Clinical treatment using analgesics, anti-inflammatory agents, or muscle relaxants did not alleviate the pain.

There were no palpable enlarged lymph nodes in the neck region. Lateral radiograph showed elongated ossified styloid process on left side (Figure 1).

Treatment After the nasal and endotracheal intubation and sterilization of the working area, partial styloidectomy of the elongated part is achieved by intra-oral approach (Figure 2).

The incision was done in the para pharyngeal space to avoid damage of carotid artery (Figure 3 and 4).

Discussion
Ossification of the stylohyoid ligament lead to an increase in the thickness and length of styloid process which then presses on the adjacent structures like the internal jugular vein, carotid artery, vagal nerve and hypoglossal nerve resulting in various symptoms [1,6,7].

There are two types of eagle syndrome as described by eagle: First is the classic styloid process syndrome due to fibrous tissue causing distortion of cranial nerve endings in the tonsillar bed after tonsil removal, and a second type due to compression of sympathetic chain in the carotid sheath [8,9].

Conclusion
With a variety of medical regimens and more definitive surgical approaches, Eagle Syndrome can be treated safely and effectively.
Figure 1: Lateral radiograph showing elongated ossified left styloid process.

Figure 2: Intra-oral approach surgery and isolation of elongated part of styloid process.

Figure 3: Styloidectomy of elongated part.
References

Figure 4: Matching of removed part of styloid process with pre-operation radiograph.