Eagle's syndrome masquerading as pain of dental origin. Case report

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Abstract

Eagle's syndrome, also known as elongated styloid process, is a condition that may be the source of craniofacial and cervical pain. It is infrequently reported but is probably more common than generally considered. The symptoms related to Eagle's syndrome can be confused with those attributed to a wide variety of facial neuralgias and/or oral, dental and TMJ diseases. In this paper, a case of Eagle's syndrome masquerading as pain of dental origin is presented and the literature is reviewed.

Key words: Eagle's syndrome, elongated styloid process, dental pain, case report.

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Introduction

In 1937 Eagle[1] first described vague orofacial, and head and neck pain associated with styloid elongation, and the condition became known as Eagle's syndrome. Since that time, many authors have described the various clinical symptoms, radiographic features, and treatment regimens seen with this syndrome.[2,3]

Eagle's syndrome is a condition that causes a dull, nagging pain in the oropharynx, abnormal findings when palpating through the tonsillar area,[4] intermittent glossitis and phantom foreign body discomfort of the pharynx.[5] There may be difficulty in swallowing and considerable pain may occur during the act.[6]

In this paper a case of Eagle's syndrome is presented and the importance of digital palpation and panoramic radiography in differentiating pain of the elongated styloid process from pain of dental origin is emphasized.

Case report

A 60 year old Caucasian female patient was admitted to the Oral and Maxillofacial Surgery Department of the Faculty of Dentistry, Gazi University, with a complaint of phantom foreign body discomfort of the pharynx and pain in the molar regions of the mandible simulating pain of dental origin. The pain radiated to the mastoid areas and she had limitation of head movement. There was no pharyngeal pain. The patient's past medical history was non-contributory and there were no extraoral findings.

The patient had been previously treated under an incorrect diagnosis of dental disease and inappropriate dental treatment, extractions of sound teeth and surgical removal of two impacted mandibular third molars were carried out. Intra-oral visual examination showed that all the mandibular teeth except the second molar, second premolar and canine on the left and all the maxillary teeth except the second molar and canine on the right and the other canine on the left had been extracted. Intra-oral soft tissues were normal. Intra-oral palpation revealed elongated painful styloid processes felt in both the left and right tonsillar fossas, and the diagnosis of Eagle's syndrome was made.

On radiographic examination, portion of a root in the right maxillary second premolar region was seen. Radiographic examination confirmed the diagnosis, showing bilaterally elongated styloid processes (Fig. 1).

The root was extracted and the patient was sent to the Otolaryngology Department for surgical shortening of the elongated processes.

Discussion

Elongation of the styloid process has been implicated previously in pain syndromes of the

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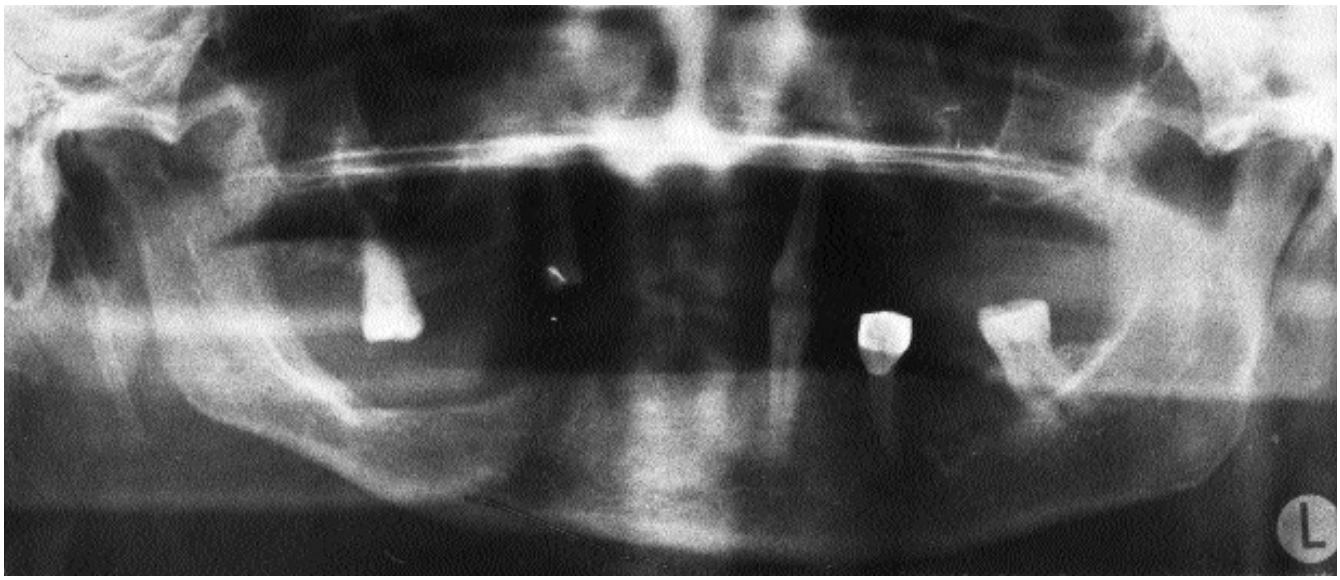


Fig. 1.–Bilaterally elongated styloid processes.

craniofacial and cervical regions,[1,7] and is frequently misdiagnosed.[5] The symptoms related to Eagle's syndrome can be confused with those attributed to a wide variety of facial neuralgias[8] or oral, dental and temporomandibular diseases.[6] In the present case, the pain in the molar regions of the mandible was masquerading as dental pain.

The elongated styloid process syndrome is often observed in the third and fourth decades of life and in women more frequently than in men. Bilateral involvement is quite common, but does not always involve bilateral symptoms.[4,6] In this case, the patient had bilateral symptoms.

Eagle's syndrome is a more common disorder than generally considered in oral and maxillofacial departments.[4] The differential diagnosis of elongated styloid process should include trigeminal neuralgia, TMJ disease,[2,4] migraine headaches, glossopharyngeal neuralgia, temporal arthritis,[2] unerupted or impacted molar teeth and faulty dental prostheses.[6]

Elongated styloid processes should be kept in mind when the clinician is faced with oropharyngeal/maxillary pain originating from impacted or unerupted third molars or dental caries. Careful palpation of the tonsillar fossa which elicits the patient's pain and a panoramic radiography examination which can show a correct picture of the elongated styloid process confirm the diagnosis.

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