ELONGATED STYLOID PROCESS SYNDROME (EAGLE'S SYNDROME)

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ABSTRACT

A 45 year old man presented with persistent pain in throat and otalgia. Clinical and radiographic evaluation confirmed the diagnosis of elongated styloid process syndrome. Surgical shortening of the styloid processes gave relief. The etiopathogenesis, presentation and management of the condition is discussed.

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KEY WORDS : Eagle's syndrome; Styloid process.

Introduction

Pain in the throat and otalgia are common complaints in an ENT clinic. Rarely, the cause is an elongated styloid process. We present one such case in which prompt relief was obtained following surgery.

Case Report

A 45 year old man presented in Jun 93 with pain in the throat and pain in right ear of 3 months duration. The pain in the throat was of a dull character and aggravated by swallowing. There was no history of otorrhea, vertigo, tinnitus, dyspnea, hoarseness of voice, dental problems or loss of weight. There had been no relief with symptomatic treatment.

On examination, the tonsils were normal in appearance. However, on palpation of the tonsillar fossae, a sharp bony projection was felt near the lower pole on both sides, more prominent on the right. Palpation elicited the same kind of pain that the patient had been experiencing on swallowing. Radiography (Caheon's projection of the skull for styloid processes) revealed bilateral elongation of styloid processes, right more than left (Fig. 1). Examination of ears, nose and paranasal sinuses did not reveal any abnormality.

In July 93, shortening of styloid processes on both sides was done under GA by intra-oral tonsillar fossa aproach. The patient obtained relief of his symptoms.

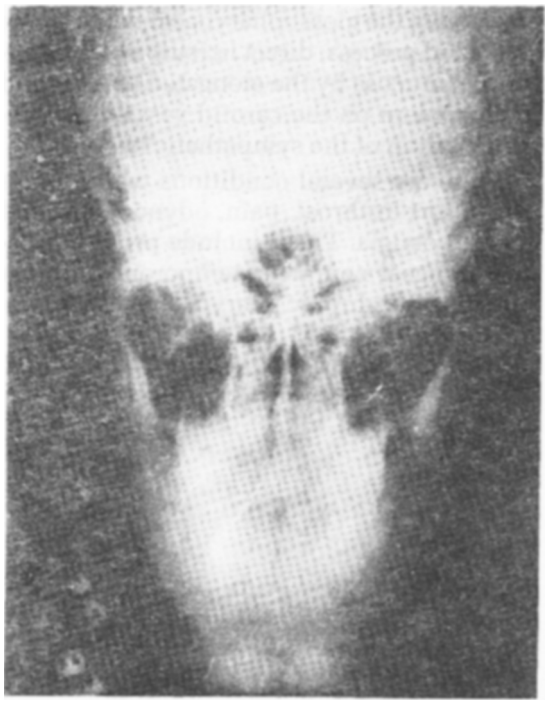

Fig. 1 : Bilateral elongation of styloid processes, right more than left.

Discussion

The elongated styloid process syndrome, with dull pain in the throat referred to the ear, difficulty in swallowing and sometimes a foreign body sensation in the throat, was first described in patients who had undergone tonsillectomy, in whom the elongated styloid

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process in combination with scar tissue was considered to cause the symptoms. However, this syndrome has also been well documented in patients not previously tonsillectomised [1]. Elongation of the styloid process more than 3 cm is found in 4 to 7 percent of the population. But symptomatic elongation is not common [2], and where bilateral elongation is present, bilateral symptoms are rare.

The pathogenesis of the styloid process elongation is unclear. Explanations which have been put forward include congenital elongation, calcification of the stylohyoid ligament and growth of osseous tissue at the insertion of the stylohyoid ligament. The exact cause of pain is unknown. Postulated mechanisms include fracture of the ossified stylohyoid ligament with non-union, compression of the glossopharyngeal nerve by the elongated process, direct irritation of the pharyngeal mucosa by the elongated process and impingement on the carotid vessels producing irritation of the sympathetic nerves.

There are several conditions which cause discomfort in throat, pain, odynophagia and referred otalgia. These include primary glossopharyngeal neuralgia, temporomandibular joint disease, chronic pharyngotonsillitis, impacted molars and also the tumours of the pharynx and base of the tongue. Detailed history and clinical examination alongwith radiological investigations help in diagnosing Eagle's syndrome.

Surgical shortening of the styloid process can be done by intra-oral and external approaches. The external approach gives better exposure with decreased risk of bacterial contamination, but it is more time consuming and leaves an external scar. The intra-oral tonsillar fossa approach is less time consuming and leaves no scar, but there is a greater chance of wound contamination and poor visualisation with increased risk of injury to the external carotid artery and facial nerve [3]. However, the choice of approach is often a matter of surgeon's preference.

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