

Foreign Body in the Wharton's Duct

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Abstract

A case of unusual presentation of a vegetative foreign body in the Wharton's duct is reported. The patient presented with history and clinical findings of recurrent left submandibular sialadenitis. Surgical excision of the submandibular gland was performed and during the ligation of the Wharton's duct, a wooden splinter was found inside the lumen of the duct. Retrospectively, patient gave the history of ingestion of the same wooden splinter, lodging in the Wharton's duct and subsequently causing recurrent attack of sialadenitis.

Key Words

Wharton's duct, Foreign body

Introduction

As compared to sialolithiasis of the submandibular gland and Wharton's duct, a foreign body in the submandibular gland and duct is a rare phenomenon. Very few cases of retrograde passage of foreign body in the Wharton's duct have been reported so far. Despite the fact that the opening of the Wharton's duct is easily accessible in the floor of the mouth, the passage of a foreign body into it is unusual because of its small calibre, its extreme mobility and the continuous egress of saliva through it (1).

One such patient with foreign body in the Wharton's duct is reported. It was found incidently, peroperatively during submandibular gland excision.

Case report

A 32-year-old male patient presented with complaints of pain and recurrent swelling in the left submandibular region for the last 18 months. On examination, oral cavity was normal, with slight tenderness on the left side.

The submandibular gland was palpable on bimanual examination but there was no palpable calculus or foreign body in the Wharton's duct or submandibular gland. An occlusal view x-ray also did not reveal any radio-opacity in the region of submandibular gland or duct.

Patient was taken for a planned surgical excision of the left submandibular gland under general anaesthesia. During peroperative examination, the gland was found to be fibrosed and adherent to the neighbouring structures because of recurrent attacks of sialadenitis. The gland was meticulously dissected. While ligating the Wharton's duct, an elongated foreign body was palpated in the lumen of the same. On exploration, a 3.5 cm long thin wooden splinter (Fig. 1) was found inside the lumen which was removed and the duct was ligated. Rest of the surgery was completed in traditional way and the patient had an uneventful postoperative recovery.

Later on, patient gave history of ingestion of same wooden splinter which got lodged in the Wharton's duct.

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Fig. A wooden splinter removed as foreign body from wharton's duct

Discussion

Foreign bodies in the Wharton's duct are a rare occurrence. In such a location, the passage of the foreign body may cause initial local pain, act as a nidus for calculus formation (2) or subsequent submandibular gland sialadenitis (1). Deep neck space infection secondary to one such foreign body has been reported (3). Of the few cases of Wharton's duct foreign bodies reported so far in the literature, those of vegetative origin predominate (2,4,5). From the isolated reports of non-vegetative foreign bodies, tooth brush bristle is the most frequent (2).

Surgical removal of the foreign bodies of the Wharton's duct is the treatment modality because the

tortuous anatomy of the duct makes the spontaneous expulsion virtually impossible. The key to surgical success lies in accurate preoperative localization. Intra-oral removal via an incision on the Wharton's duct in the floor of mouth can be attempted but might be difficult in view of extreme mobility of the duct, its close proximity with the lingual nerve and the risk of pushing the foreign body more distally, towards the submandibular gland. In order to prevent postoperative ductal stenosis, the incision on the Wharton's duct should be marsupialized rather than closed primarily. However, in the case of foreign body which cannot be accurately localised or is situated posteriorly, a traditional submandibular approach via horizontal cervical skin incision is preferable as it is simple and safe option for removal of foreign body and prevention of subsequent complications (6).

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