

# Gutta Percha Cone Location In Whartons Duct: A Case Report

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## Abstract

A lady, 81 years old, attended the Oral Surgery clinic because she suffered from left neck swelling and painless left sublingual mucosa lump. The use of gutta percha radiography for the oral fistula pathway estimation has been recommended in the literature. In our case the use of gutta percha panoramic radiography served as tool in the referral procedure for the proper diagnosis. Concluding the use of gutta percha "filled" panoramic tomography may be used by dentist for identifying the involvement of Wharton's duct.

## CASE REPORT

A lady, 81 years old attended the Oral Surgery clinic because she suffered from left neck swelling and painless left sublingual mucosa lump. The intra-oral sublingual lump borders extended superiorly from the anterior left lateral margin of the tongue to the floor of the mouth and lingual frenum (Fig. 1).

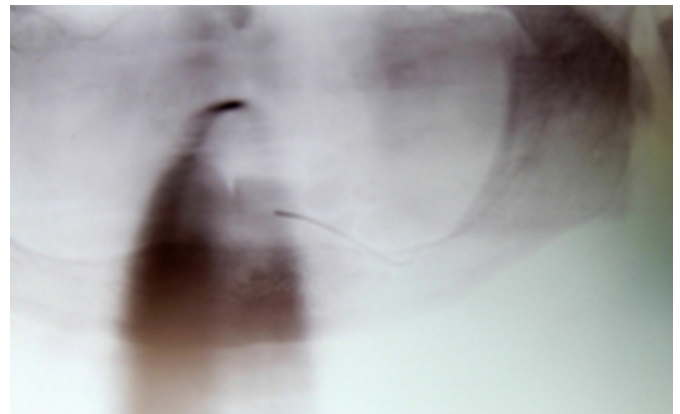
### Figure 1



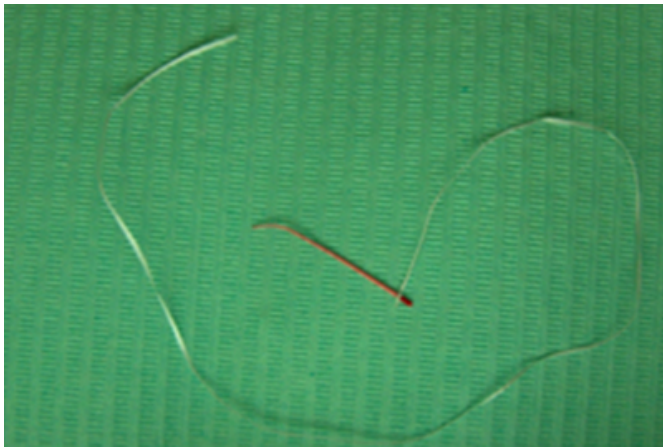
The neck swelling has been limited in the left submandibular triangle. The patient was edentulous in both upper and lower jaws and rehabilitated by complete dentures 23 years ago. The lower denture borders were not in contact with the sublingual lump. Her medical history was free apart from the hypertension, which was controlled by antihypertensive medicaments per os.

The diagnosis of odontogenic inflammation spread or mandibular inflammation or inflamed dilated Wharton's duct suggested at the beginning of the treatment plan. The patient referred for a negative dental panoramic tomography examination (Fig. 2), with a gutta-percha cone (Fig. 3) in the orifice of the lump. This was suggested to explore the pathway of the pathological lesion.

### Figure 2



**Figure 3**



The radiological findings indicated the involvement of the left Wharton's duct. The patient referred to Otolaryngology department where the diagnosis of acute suppurative sialadenitis confirmed.

## **DISCUSSION**

Abscess formation in the stomatognathic area is often a sequence of odontogenic pathosis <sup>1</sup>. The fistula formation indicates a pathological pathway of pus escape into surrounding tissues.

In dentistry, the use of gutta-percha is mainly limited in endodontic therapies. One of the major properties of this material considered to be the radiopacity <sup>2</sup>. The previous theory explains the possible diagnostic use of gutta-percha in roentgenology for the estimation of the origin of the odontogenic fistulae <sup>3</sup>. At this case report a random finding of localized gutta-percha in Wharton's duct was observed.

In Otolaryngology the use of diagnostic ultrasound and micro-endoscopic techniques sound very promising <sup>4,5</sup>. The only absolute contraindication for endoscopy of salivary glands considered to be the acute form of sialadenitis <sup>6</sup>.

Since it is impossible, according to the evidence based medicine to suggest the findings of the current case report as a new technique we recommend the secured location of sterilized gutta-percha by dental floss in dental clinics; a

clinical environment not necessarily related with diagnostic ultrasound, sialendoscopy equipment and other medical related techniques. The dental tomography is a common practice for most of the dentists. Therefore the use of sterilized gutta-percha cone sialography in inflamed Wharton's duct may be performed easily in dental practice.

Concluding, the use of sterilized gutta-percha cone is not considered to be superior from the well-known medical techniques but may be a promising alternative for the dentists interesting in excluding or confirming the involvement of the Wharton's duct in sublingual suppurations. This will assist in the referral procedure, for the patients benefit, to otolaryngology specialists. A dental practice that is not always ideal due to a lack of diagnostic procedures in the associated environment. Therefore, the gutta-percha use in oral radiology seems to be a lesson learnt with positive findings such as cost effectiveness and asepsis, mainly in acute suppurations. To the best of our knowledge, the use of gutta percha cone in Wharton's duct assessed by negative panoramic tomography has not been described up to know in the English literature; therefore should be further assessed.

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