

# Unusual Presentation of Foreign Body Fish Bone in the Oral Cavity - A Case Report

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**Abstract:** Fish bone impaction is a fairly common complaint in the ENT-outpatient and emergency. Most fish bone impactions occur in the tonsil, tongue base, vallecula and cervical oesophagus. Impacted fish bone in tongue is very rare. The case presentation demonstrates a rare case of a fish bone embedded in the tongue for 8 months with minimal symptoms. The foreign body was visualized by MRI and removed under general anaesthesia.

**Keywords:** fish bone, foreign body, tongue

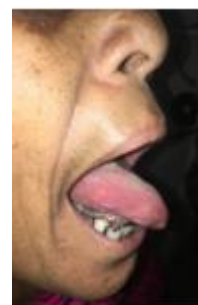
## 1. Introduction

Foreign bodies in oral cavity are quite common presenting to the department of otolaryngology. Various objects have been reported such as from fish bones, metallic objects, teeth etc. Fish bones are the most common impacted foreign bodies in the upper aero-digestive tract and have been found in the tonsil, soft palate, base of the tongue, vallecula, posterior pharyngeal wall and upper esophagus [1]. Majority of them pass spontaneously. However 10-20% make their way into the soft tissues and require non operative intervention with less than 1% requiring surgery [2]. However foreign body fish bone getting impacted in the mobile tongue is very rare and whenever they do so they generally mimic malignancy [3]. There are very few reportings of the same in the literature. We have experienced a rare case of a totally embedded foreign body in the tongue of which the details have been reported.

## 2. Case Report

A 60 year old female presented to the outpatient department of otolaryngology with the history of fish bone impaction 8 months back now presenting with swelling and pain over the right lateral border of tongue with difficulty in swallowing.

On examination, there was a globular swelling measuring approximately 3cms×2cms. On inspection, there was no erythema or evidence of penetration at the site of injury. On palpation, there was slight tenderness and induration felt which could be discerned as a linear hard object possibly a foreign body. The tongue movements were normal and there was no neurological deficit of the tongue. Considering the age of the patient and on the basis of suspicion a contrast enhanced magnetic resonance imaging (MRI) of the tongue, a well-defined elongated T2WI and STIR hyper intense cystic lesion with a linear T2 hypo intense structure within involving the hyoglossus presumably to be a foreign body fish bone was diagnosed. Rest all baseline investigations were normal.



**Figure 1:** Intraoperative before incision (note swelling in the right lateral border of tongue approx. 3×2cms)

The patient was prepared for general anaesthesia. Under anaesthesia, a vertical incision about the size of 3 cm given over the swelling. Blunt dissection revealed some amount of pus and a fish bone about 1cm long seen and taken out. Closure achieved with absorbable sutures.



**Figure 2:** Foreign body fish bone approx. 1cm long

Healing was uneventful and the patient was completely symptom free when the case came for review after 2 weeks.



**Figure 3:** Postoperative wound after 2 weeks

## 3. Discussion

Foreign bodies lodged in the mobile tongue are generally superficially embedded and can be removed in most instances by the patients themselves or by the general

practitioner<sup>[3]</sup>. Even though the foreign bodies in this location can be safely removed in most cases, some cases with retained foreign body may present as an enlarged mass or lingual abscess that may compromise the airway. Impacted fish bones being sharp and pointed objects are dangerous and should be removed as soon as possible because of their tendency to migrate to the adjacent structures such as thyroid, carotid artery, subcutaneous neck and cervical spine<sup>[4]</sup>. A case of Ludwig's angina from a migrating fish bone has also been reported in literature<sup>[5]</sup>.

Rarely foreign bodies embedded in the tongue become intramural and their removal becomes difficult without proper visualisation. In these instances, positive patient history and clinical signs and symptoms along with radiological investigations play an important role in detection of suspected foreign body. Fishes such as mackerel, trout, salmon have poorly radiopaque bones and therefore not likely to be seen on Xray<sup>[6]</sup>. Computed tomography (CT) is one of the available modalities for the evaluation of foreign bodies but the findings are often obscured by the dental artifacts and beam-hardening artifacts caused by the attenuated mandibular bone<sup>[7]</sup>. In case of an intramural foreign body, MRI plays the most important role to assess its position, shape and size and also helps in differentiating foreign bodies from the malignant lesions in the tongue.

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