

Case Report

Fish Bone embedded in the Tongue: Report of an Interesting Case

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Abstract: Here, we report a case of fish bone completely embedded in the tongue with symptoms present for over a month. The foreign body was located using an innovative & cost effective technique where an intraoral periapical film was placed beneath the tongue. The foreign body was removed surgically under local anesthesia.

Keywords: fish bone, tongue, intra oral periapical radiograph.

INTRODUCTION

Fish bone piercing the oral mucosa is quite common and when it enters the pharyngo esophageal tract it becomes an emergency [1]. Fish bones in the mobile part of the tongue lodge superficially and are usually removed easily by the patients themselves[2].

Ingestion of foreign bodies is a common occurrence. Majority of ingested foreign bodies pass spontaneously, however, 10-20% stray into the soft tissue and require non-operative intervention with <1% requiring surgery [3]. Fish bone is the most common foreign body found piercing the pharyngeal and oral mucosa in the Asian population due to the practice of serving fish as a whole along with the bones. Knight and Lesser[4], in their case series of 71 patients with fish bone penetrations found the foreign body in 21% of cases. Of these 93% were in the oropharynx. The most common site was the base of the tongue (53%) followed by the tonsillar region (20%).

CASE REPORT

A 55 year old male patient presented to the Department of Oral and Maxillofacial Surgery with a history of fish bone piercing the lateral aspect of the tongue two months ago. The symptoms were dull pain and swelling in the region of piercing and difficulty in swallowing and tongue movements. The patient had consulted various doctors in the locality before visiting our hospital but the condition had not been diagnosed.

On examination, there was a mild diffuse swelling on the lateral border of the tongue on the right side measuring approximately 2cm x 2cm (Fig 1). There was no evidence of erythema, abrasion or penetration at the site of injury. Mild restriction of

tongue movements was noted due to pain and there was no neurosensory deficit of the tongue. There was mild tenderness on palpation of the tongue on the affected side however, the foreign body could not be felt. The fish bone was located using an intraoral periapical radiograph that was placed beneath the tongue on the affected side. The foreign body appeared as a faint radio opaque line in the tongue (Fig 2). Local anaesthesia was infiltrated around the swelling and a 0.5-1cm incision was placed. Blunt dissection was carried out within the tongue tissues (Fig 3) and a fish bone, approximately 1cm long, was located and retrieved (Fig 4). Primary closure was achieved.

Healing was uneventful and sutures were removed after a week. One week post-operatively, the patient was completely symptom free with normal tongue movements.



Fig 1: Diffuse swelling on the lateral border of the tongue on the right side measuring approximately 2cmx2cm



Fig 2:Intra oral periapical radiograph with white arrow indicating swelling of tongue & black arrow indicating linear radio opaque foreign body in the substance of tongue



Fig 3: Foreign body being removed surgically under local anesthesia



Fig 4:Fish bone, approximately 1cm long, was located and retrieved under local anesthesia

DISCUSSION

A recent report described fish bone penetration in 722 cases, with 19% of cases involving upper oesophageal area, however, there are only few cases involving foreign bodies totally embedded in the mobile

tongue. Even though the foreign bodies in this location can be safely removed in most cases, some cases with an enlarged mass or lingual abscess may compromise the airway. Ingested fish bone should be removed as soon as possible owing to their linear, sharp and pointed contours and their tendency to migrate[5]. Migration of fish bone to adjacent structures such as the thyroid, carotid artery, subcutaneous neck and cervical spine and a migrating fish bone causing Ludwig's angina[6,7] have been reported[6]. Foreign bodies embedded in the oral area are thus far from reassuring[3].

Positive patient history and clinical signs and symptoms play an important role in suspecting foreign body entrapment. Radiographs may be of use if no fish bone is found during clinical examination. Commonly eaten fish in UK such as mackerel, trout, salmon have poorly radiopaque bones and are therefore not likely to be seen on X-ray[4]. CT detection of fish bone in tongue and ultrasound guided fish bone removal have been reported[8]. Conventional imaging however, plays an important role in developing countries like ours where, the socioeconomic status of the patient requires consideration. A routine intra oral periapical radiograph helped us locate the foreign body and hence the patient was not subjected to higher imaging modalities.

We present a rare case of a fish bone completely embedded in the tongue which was detected with the help of cost effective conventional imaging and removed under local anesthesia. The patient is under follow-up and is asymptomatic.

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