



A concealed foreign body embedded in the mobile tongue—A rare case report

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Abstract

This is a case report of concealed foreign body embedded in the mobile tongue. Ingestion of foreign bodies in the oral cavity and pharynx is a very common incident. In many instance patients will be able to retrieve back the foreign body except when they got impacted inside the pharyngo- esophageal tract. Here we present an unusual case report of a patient with a foreign body a (fish bone) gets embedded deeply inside the mobile muscular part of tongue with a draining sinus for the last 10 years. Patient had visited multiple clinics and hospital for the swelling and pus discharge from the tongue but unfortunately a proper diagnosis cannot be made. One such case is described here.

Keywords: concealed, embedded, foreign body, tongue

Introduction

Ingestion of foreign bodies is very common. Majority of these foreign bodies can be retrieved back by the patient itself, however, 10-20% stray into the soft tissue and require non-operative intervention with <1% necessitate the need of an operative retrieval [1]. A wide variety of objects have been reported as, including fish bones [2], metallic material [3, 4] dental material [5]. 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. They are usually lodged in the tongue base, soft palate, tonsil etc. [6]. In the study by Knight and Lesser [7] in a case series of 71 patients with fish bone penetrations the most common site was the base of the tongue (53%). Usually such bodies are commonly lodged superficially and are easily removed by the patients themselves or by general practitioners [8]. But when such bodies pierce the pharyngo esophageal tract it becomes an emergency [9].

Case Report

In general a fish bone that gets penetrated inside the tongue is located superficially. But it is unusual that a fish bone gets embedded deeply inside the mobile muscular part of tongue with a draining sinus. One such case is presented here.

A 52 year old male patient reported to our outpatient department with chief complaint of pain swelling with occasional pus discharge from the right side of tongue. He had a history of trauma with fish bone in the same area before one year. He was able to remove the fish bone by himself. Later on pain and swelling developed in the same area for which he had consulted multiple clinics and was in antibiotics. Patient gives a history of hypertension but was not on regular medication.

On examination of the tongue, a 2.0×1.5-cm mass in the right side on the ventral surface of the tongue was noted (figure 1). The tongue mucosa was intact and was greyish black in color. The mass was firm, circumscribed and painful to palpation. Also a sinus opening was noted in the ventro-lateral aspect of tongue from which mild pus discharge was noted on palpation.

Investigations

All the routine blood examinations were performed. Patient's fasting blood glucose was high and hence HbA1c was 11.8%. To control the hyperglycemia systemic management was carried out. An MRI was taken which revealed linear altered signal intensity noted in the ventral aspect of tongue in the sublingual region measuring 28 mm in length and 3.2 mm in width towards right lateral border. It appears hyper intense in STIR and adjacent post contrast enhancement noted. An external sinus opening noted in its anterior aspect.

Treatment Done

Foreign body exploration and removal with excision of sinus tract were done under GA and the wound was sutured with 4.0 vicryl suture material. Then the sinus was transferred to 10% buffered formalin and was sent for histopathological examination.

Discussion

For an enlarged tongue mass, the diagnosis of a foreign body is not considered first since patient often forget such history because the initial trauma has either been suppressed or simply been forgotten by the patients at the time of initial examination [5]. There are many possibilities for the differential diagnosis of an enlarged tongue mass, including schwannoma, germ cell tumor, irritative firm mass,

Lymphoma or inflammation lesion [10]. A clear pathological study is needed in such cases. Plane radiography usually give many false negative cases in locating foreign bodies [6]. Commonly eaten fish such as mackerel, trout, Salmon have poorly radiopaque bones and are therefore not likely to be seen on plain radiography [8]. CT detection of fish bone in tongue and ultrasound guided fish bone removal have been reported. Once a foreign body is suspected the particles are better defined in form and size with computed tomography and ultrasound than with either MRI or plain radiography



Fig 1: swelling with sinus tract in relation to the right ventrolateral aspect of tongue



Fig 2: Foreign body explored and retrieved



Fig 3: Sinus Tract exploration



Fig 4: Excision of sinus tract with foreign body



Fig 5: Closure

References

1. Tokutaro M, Mayumi U, Yoshinori S, Izumi A. Injury Extra,2012;43:148-150
2. Patel KS. Foreign body in the tongue: an unusual site for a common problem. J Laryngol Otol,1991;105:849-852.
3. Da Silva EJ, Deng Y, Tumushime-Buturo CG. An unusual foreign body in the tongue. Br J Oral Maxillofac Surg,2000;38:241-242.
4. Dubey SP, Banerjee SB, Ghosh LM. Pharyngeal perforation by a swallowed sewing needle. Eur Arch Otorhinolaryngol,2000;257:462-463.
5. Samborski CS, Mix JA. Foreign body in tongue. Oral Surg Oral Med Oral Pathol, 1985;59:54.
6. Jones NS, Lannigan FJ, Salama NY. Foreign bodies in the throat: a prospective study of 388 cases. J Laryngol Otol, 1991;105:104-108.
7. Chidzonga MM. Fish bone in anterior tongue- report of two cases. Br J Oral Maxillofac Surg, 2005;43:409.
8. Knight LC, Lesser TH. Fish bones in the throat. Archives of Emergency Medicine, 1989;6:13-16.
9. Hassan N, Mohamad I, Ramiza RR. Fish Bone Piercing Epiglottis: A Case Report. Bangladesh Journal of Medical Science,2010;9(1):53-55.
10. Nelson W, Chuprevich T, Galbraith DA. Enlarging tongue mass. J Oral Maxillofac Surg,1998;56:224-227.
11. Oikarinen KS, Nieminen TM, Makarainen H, Pyhtinen J. Visibility of foreign bodies in soft tissue in plain radiographs, computed tomography, magnetic resonance imaging, and ultrasound. An *in vitro* study.

Int J Oral Maxillofac Surg, 1993;22:119-124.