## **Case Report**

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# Migratory fish bone complicating as neck abscess

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#### **ABSTRACT**

Accidental ingestion of fish bone is usually uncomfortable, some cases it may be dangerous to a patient, a challenging diagnosis. A retained fish bone may have potentially disastrous complications which may affect the morbidity or mortality. Fish bone may even penetrate extra-luminally and reside in the soft tissue of the neck. Computed tomography (CT) of the neck is of great assistance in diagnosing a migrating fish bone. Surgical exploration is mandatory.

Keywords: Fish bone, Migratory, Deep neck infection, Abscess

## INTRODUCTION

Foreign body ingestion is a common complaint seen by practicing otolaryngologists. It occurs in both adults and children. In literature, various cases have been described where foreign bodies have been ingested and have lodged in the upper aero digestive tract, but only a few of these foreign bodies have perforated the oesophagus and an even smaller number of these have migrated extraluminally. Fish bones constitute more than 85% of all foreign bodies.2 There have been rare cases reported, in which the foreign body actually exits through a puncture wound in the skin of the neck.<sup>3</sup> Here we report a case of foreign body which has extruded through the skin and formed a neck abscess. If untreated, these migratory foreign bodies may result in life threatening suppurative or vascular complications. The specific nature of the symptoms of course is very helpful in localizing the site of the foreign body. Endoscopic findings of ulceration, oedema, and laceration should lead to the suspicion of migration.<sup>4</sup> A CT scan utilizing fine cuts is invaluable in localizing the foreign body. Exploration of the neck via an external approach to remove the foreign body is the

recommended treatment. The X-ray C arm can be helpful during the procedure. In our case, the patient's consent was obtained for publication.

#### **CASE REPORT**

A 38 year old male, presented with painful swelling in front of the neck since 1 week, measuring about 3×3 cm, at lower 1/3<sup>rd</sup> of left sternocleidomastoid muscle which is erythematous, tender, fluctuant in nature. Patient presented with symptoms of fever since 1 week and sensation of foreign-body lodgment (fish bone) with a stabbing pain in his throat 2 years back. Initial radiography and flexible fibre-optic endoscopy of the neck were both negative. On upper gastrointestinal examination, an irregularly fibrosed esophageal wall was detected 16 cm from the upper central incisor. Contrast enhanced computerized tomography (CECT) neck was planned later on. Reports were suggestive of Linear hyper intense lesion, suggestive of bony mass measuring 1.6 cm×0.2 cm, 1 cm above the sternoclavicular joint, 1cm lateral to the midline in cephalo-caudal direction, with signs of abscess around it. Surgical exploration was

performed via a neck incision under general anesthesia; the fish bone was successfully retrieved. The fish bone was embedded in the tissue plane below left sternocleidomastoid muscle. Post-operative recovery was uneventful. On follow up, post- operative surgical site is healed and healthy.



Figure 1: Swelling in front of the neck since 1 week.





Figure 2: CECT neck: fish bone located transversely over left SCM.

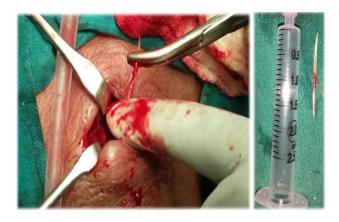


Figure 3: Surgical exploration revealed the fish bone measuring about 1.6 cm.

#### **DISCUSSION**

Foreign body ingestion is a common presentation. Commonly children present with foreign body coin ingestion while in adults usual foreign bodies are fish bone, meat bolus and dentures Migration of foreign body usually takes 24-72 hrs and usually are forgotten cases or not taken seriously by patients or not properly investigated. Usually migration is noticed after a negative endoscopy with positive ski gram. The incidence of ingested foreign bodies penetrating the esophagus & being extraluminal in the neck is fairly rare.

Due to the direction and site of the migration of the foreign body, severe or even fatal complications may occur. These are aorto-esophageal fistula, innominate esophageal fistula, subclavian esophageal fistula, carotid rupture, local suppurative processes such as periesophageal abscess, mediastinitis, retropharyngeal abscess, thyroid abscess, and deep neck abscess.<sup>5-7</sup>

A migrated foreign body can occur in any age group, the possibility should always be borne in mind when throat discomfort symptoms are persistent and there is history of swallowing difficulties involving fish bones.<sup>8</sup>

Most ingested foreign bodies pass through the gastrointestinal tract uneventfully within one week. One of the uncommon complications of ingested foreign bodies is migration, which has the potential to cause morbidity and mortality.

A plain radiograph is usually arranged to confirm the diagnosis of an ingested fish bone; however, the clinical utility is questionable. Leu et al reported a sensitivity and specificity of 39% and 72%, respectively for their plain radiographs. <sup>10</sup>

A thorough oral examination, flexible fiberoptic endoscopy, neck radiography is essential for initial diagnosis of fish bone impaction in the upper aerodigestive tract. A CT scan is another useful tool for locating the intruding object, obviating unnecessary surgical intervention.

## CONCLUSION

Fish bones are a rare etiology of neck abscesses. An ultrasound neck and intra-oesophageal probe, CECT Neck may yield better diagnosis and CT scan of the neck helps in early diagnosis of such misplaced or suspected foreign bodies and to planning for surgery. CT also helps in diagnosing any complication caused by the foreign body migration or impending complication which might occur during removal. A careful assessment of the patient with a foreign body in the throat is crucial to avoid fatal complications.

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