

## Case Report

# An interesting case of extraluminal migrating fish bone

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### ABSTRACT

Hypopharyngeal and oesophageal foreign bodies are usually intraluminal but sharp foreign bodies can get impacted submucosally or extraluminally due to inadvertent attempt of removal by patient. Foreign body impaction is a common condition in Asian populations, with fish bone being the most common, often migrating to the lateral neck space or related organs. This case report emphasizes the significance of proper history and awareness among clinicians about the migration of fish bones, aiming to prevent diagnosis delays and potential complications. The present case depicts an unusual presentation of fish bone in case of 71 year old male patient farmer by occupation presented with chief complains of difficulty in deglutition, right side diffuse neck swelling associated with foreign body sensation in throat. The patient underwent clinical and radiological examination, which was diagnostically confirmed that fish bone present in retropharyngeal space. In management we had done tracheotomy followed by endoscopic examination and SOS removal but foreign body not found intraluminally. Patient started on higher antibiotics to decrease septic foci. Patient improved drastically and managed the patient conservatively. To our knowledge such a case has not been reported in literature.

**Keywords:** Retropharyngeal, Foreign body, Extraluminal, Fish bone, Migrating

### INTRODUCTION

Foreign body ingestion is a prevalent issue in the practice of otorhinolaryngology. Ingestion of foreign bodies is quite prevalent among Asian populations, with fish bones being the most commonly eaten foreign body. Typically, odynophagia, a prickling feeling during deglutition and a foreign body sensation are present. Most of the patients seek medical attention and recover well without any unwanted complications by passing down the gastrointestinal tract.<sup>1</sup> Few of the fish bones are retained in the oesophagus. Delay detection of fish bone impaction or missing bone is usually due to negative findings of laryngoscopy and also due to low sensitivity of lateral neck radiograph.<sup>2</sup> In such cases where fish bone has migrated extraluminally would result a negative laryngoscopy and oesophagoscopy Although foreign

bodies in the hypopharynx and oesophagus are often intraluminal, patients may unintentionally attempt to remove sharp objects, resulting in submucosal or extraluminal impacts. This case shows an uncommon presentation of a fish bone in the retropharyngeal area along with a history of ingesting foreign bodies that was treated conservatively. As far as we are aware, no literature has reported on this particular situation.

### CASE REPORT

A case of 71 year old male patient farmer by occupation presented with chief complains of difficulty in deglutition right side diffuse neck swelling associated with foreign body sensation in throat since 6 days of duration (Figure 1).



**Figure 1: Clinical presentation of a patient of foreign body ingestion.**

He gave history of pricking sensation in throat while having fish meal. He felt a sudden sharp pain in his throat followed by persistent foreign body sensation. Then he took analgesic for relieving of pain. After 6 days he referred for Ent consultation for persistent throat pain, difficulty in deglutition and neck swelling. There were no complains of vomiting hemoptysis or hematemesis. There was no dyspnoea or stridor. Patient was known case of diabetes malitus on medication. On examination, his general condition was moderate. Vital parameters were well maintained. Systemic examination normal.

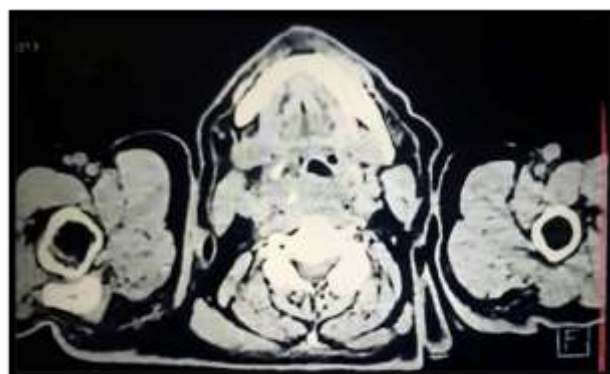
Throat examination shows bulging over right peritonsillar area and posterior pharyngeal wall. On neck examination firm to hard diffuse swelling at right cervical region which was tender. Neck movements were painful. Indirect laryngoscopy not done as patient was uncooperative. There was no sign of external or internal trauma. Laryngeal crepitus was present.



**Figure 2: Radiological examination computed tomography of neck done shows a thin foreign body 4 cm in length lying in vertical plane at C5 vertebrae.**

Patient was investigated for routine blood investigation and serostatus. Radiological examination computed

tomography of neck done shows a thin foreign body 4cm in length lying in vertical plane at C5 vertebrae (Figure 2). Patient posted for direct laryngoscopic examination and SOS removal of foreign body.



**Figure 3: 3D CT neck shows evidence of vertical foreign body (fish bone) in retropharyngeal space.**

As also suspecting for retropharyngeal abscess to avoid aspiration tracheostomy done in emergency. Patient under general anesthesia direct laryngoscopy done. There was oedematous necrotic mucosa which was foul smelling in pyriform fossa and posterior pharyngeal wall. Esophagoscopy done. There no evidence of any foreign body. Ryles tube put and patient shifted to ICU. Then patient started on higher IV antibiotics and analgesics. Repeat computed tomography neck done after 3 days. Findings were the same. 3D CT neck shows evidence of vertical foreign body (fish bone) in retropharyngeal space (Figure 3). On post operative day 5 patient posted for endoscopic examination to look for any intraluminal foreign body. Hypopharyngoscopy and esophagoscopy were normal. No evidence of foreign body edema and congestion were reduced. No sign of internal trauma or any perforating wound over posterior pharyngeal wall. Palpation of posterior pharyngeal wall did not reveal any abnormality. He was diagnosed as a case of migrating foreign body in retropharyngeal space.

He was on broad spectrum antibiotics, his symptoms of foreign body sensation disappear, neck swelling reduced. Portex tracheostomy tube shifted to metallic tube and decannulation done. Since he become totally asymptomatic, he had no dysphagia and there were no symptoms of retropharyngeal abscess or cellulitis no active intervention was done. Patient was discharged after the 15 days of hospital stay and called for review after 1month and 3 months. During review he was asymptomatic and had no feature of deep neck space infection.

Despite the potential severity of lesion, since the patient had a favourable outcome and was asymptomatic. No surgical approach was considered necessary to retrieve the foreign body.

## DISCUSSION

Children, older adults, and patients with psychogenic symptoms are more likely to have foreign materials in their aerodigestive tract. Fish bones and coins are the most frequent foreign bodies seen in the aerodigestive tract. Foreign bodies in the oesophagus and hypopharynx are typically detected intraluminally. Very few intriguing reports of foreign things other than lumen in the pharynx and oesophagus have been made. A 28-year-old male patient experienced a perforating wound to his neck caused by a piece of wire, according to a study.<sup>3</sup> After puncturing the larynx and hypopharynx, this foreign body was placed in the retropharyngeal space at the level of the sixth cervical vertebra. No complications occurred, and the patient was treated conservatively with antibiotics rather than undergoing surgery.

The nearest similar case to the present one where 45 yr old serving junior commissioned officer presented with complains of foreign body sensation in throat after history of chicken meal.<sup>4</sup> There was presentation of metallic foreign body 4 cm in length in retropharyngeal space at C5 level without evidence of abscess or cellulitis. Despite potential severity of lesion, since the patient had favourable outcome and was managed on intravenous antibiotics and no surgical approach was done.

A case, 30-year-old man arrived with an extraluminally migrating fish bone that had pierced the carotid sheath and jolted the internal and external carotid arteries.<sup>1</sup> The patient had a rigid esophagoscopy and laryngoscopy, but no foreign body was discovered. An oblique neck X-ray showed a radio opaque mass is visible on the X-ray at the cervical vertebral body level C6-7. Due to acute pain on the right side of the neck, the patient required immediate surgical exploration and foreign body extraction. No foreign body was found on rigid esophagoscopy or laryngoscopy in this particular case either. The posterior pharyngeal wall palpated normally as well.

A case of retropharyngeal abscess brought on by a fish bone puncturing the hypopharynx. In their case, endoscopy revealed a posterior pharyngeal wall protrusion; no foreign body was discovered.<sup>5</sup> The foreign substance was palpated and extracted from the retropharyngeal area using a cervical technique to drain the abscess. Although there is mucosal necrosis and cellulites in our case, there is also no sign of a foreign body once the cellulites are reduced.

An imparted metallic foreign body was found in the left lateral pharyngeal wall, slightly beyond the level of the epiglottis. According to a study, an external trauma in the area of the left mastoid process served as the entry point. Despite the prolonged foreign body impaction, there was

no internal or external neck abscess, emphysema, or mediastinitis.<sup>6</sup>

A study, reported a case of long-standing foreign body that is chicken bone in retropharyngeal space for prolonged period without any major symptom except throat pain, without retropharyngeal abscess. Foreign body removed intraorally.<sup>7</sup> The present case was unusual in many ways there was no external trauma. Patient had a retropharyngeal abscess which was drained after that sensation of foreign body relieved. Only the history was suggestive of fact that foreign body had reached the retropharyngeal space after intraluminal penetration. There were no complication and hence patient was managed conservatively.

## CONCLUSION

Fish bone ingestion can result in retropharyngeal abscess. fish bone penetration into retropharyngeal space accidentally staying for long time without any symptoms is extremely rare. The history and radiological investigation are important for proper diagnosis and location of foreign body. Extra luminal migration of fish bone is very rare and very few cases have been reported.

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