EXTRALUMINAL MIGRATION OF ACCIDENTALLY INGESTED FOREIGN BODY: AN UNUSUAL CASE REPORT

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INTRODUCTION: Foreign body is very common in the aerodigestive tract but extraluminal presentation is quite uncommon albeit not rare in our daily practice. [1] Most of the time, the foreign body is impacted in the tonsil or the base of tongue or it may be found in the upper oesophagus. [2] If foreign bodies are not removed, it may lead to complications like abscess formation, perforation and also life-threatening mediastinitis. [3] While inhaled foreign bodies usually present as an acute emergency, ingested foreign bodies generally have a delayed presentation; especially wires and fish bones go unnoticed in the first few days and finally present with symptoms. In those cases where foreign bodies migrate, manifestation is generally delayed considerably. [4] They may also injure the adjacent blood vessels or present as a neck abscess.

CASE REPORT: A 31 year old female presented to the ENT outpatient department with a protruding swelling on the left side of the neck for the last five days with fever and neck pain for one day. She gave a history of suspected accidental ingestion of something seven days back with a meal of puffed rice. There was immediate pain but after manipulation with fingers and taking some treatment from a local quack, the pain was relieved. However, after 2 days, she noticed a small swelling on the left side of the neck.

On clinical examination, a small protrusion was noted on the left side of the neck 2 cm away from the midline at the level of the lower border of the cricoid cartilage [Fig. 1]. Oropharyngeal and indirect laryngeal examination did not reveal any foreign body. Radiograph of the soft tissue neck showed the presence of a radioopaque linear shadow in the soft tissue of the neck [Fig. 2]. An emergency exploration of the neck under general anaesthesia was performed. A 3 cm incision was made at the point of protrusion and after incising the platysma and the deep fascia, the tip of a wire could be located [Fig. 3]. The wire was traced in continuity and gently removed. Length of the wire was 3 cm. Wound was closed with 3-0 Nylon sutures. Patient was discharged on the next day with a course of oral antibiotics for seven days. Post-operative recovery was uneventful.

DISCUSSION: Foreign body migration is one of the most uncommon characteristics of accidental foreign body ingestion. Fish bones are the most common migrating foreign bodies.^[5] Ingested foreign bodies easily pass through the alimentary tract within a maximum of one week but if it enters within the soft tissues, it generally does so within 24 to 72 hours.^[6] A negative clinical examination with a suggestive history and positive findings on radiology confirm the migration of the foreign body.^[5] Contraction of the cricopharyngeal muscle plays a definite role in the migration of foreign bodies, especially those which are ingested accidentally without the patient's knowledge.^[7]

Detection of these migratory foreign bodies is very difficult because they present with varied symptoms like asthma, recurrent respiratory tract infections, excessive salivation, etc. as they have the capacity to create fistulas in surrounding structures.^[8] Nature of the foreign body also plays a significant role in migration. Hard pointed foreign bodies like fish bones or wires have been reported to have migrated into the surrounding tissues without specific symptoms. Patients are often unaware of the presence of such a foreign body.^[9]

Foreign body migration is not rare but uncommon. A series of 24 cases of migratory foreign bodies were reported from Singapore. A large study on 1088 cases of ingested foreign bodies in China reported only a few cases of migration. Our patient presented 7 days after the suspected foreign body ingestion. Studies have shown that it can take up to 41 days for a foreign body to migrate through the skin from the aerodigestive tract. In our case, we found a 3 cm long wire in the soft tissues of the neck which was ingested accidentally 7 days back. The mean length of sharp and pointed foreign bodies in other studies has been stated to range from 2 cm to 4.1 cm. [9,11]

We also confirmed that the foreign body was not present in the hypopharynx or larynx. In the soft tissue neck skiagram, the foreign body was visible at the level of the cricoids within the soft tissue of the neck. Traditional ways of locating foreign bodies are plain radiographs, barium swallow radiographs and oesophagoscopic examination. In our case, as a metallic wire was present, it was easily detected on a plain radiograph. However, small fish or chicken bones may evade detection on plain radiographs and CT scans would be advisable to detect the foreign body in such conditions. [12] Most studies advocate an open approach to extract the migratory foreign bodies as we did in our case. [1-12]

CONCLUSION: In conclusion, we must emphasise the necessity of keeping in mind the prospect of presence of a migratory foreign body in a patient who presents with complaints of pain in the throat along with the suspicion of foreign body ingestion. Negative endoscopic examinations do not rule out the presence of a foreign body and to avoid complications, some of which may even be fatal, other appropriate investigations should be undertaken to arrive at the final diagnosis.

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Fig. 1



Fig. 2



Fig. 3

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