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## A SERIES OF UNCOMMON FOREIGN BODIES PRESENTING IN THE AERO-DIGESTIVE TRACT

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## **ABSTRACT**

Foreign body impacted in the aero-digestive tract is one of the earliest reported problems. Coins, buttons, marbles, crayons, parts of toys etc. are the most commonly ingested foreign bodies in children. Fish, meat and chicken bones, dentures, nails etc. are the most common foreign bodies ingested by adults. We report a series of unusual foreign body ingestion in aero-digestive tract and their management by endoscopic retrieval.

## **KEYWORDS**

Foreign Bodies, Aero-Digestive Tract, Endoscopic, Oesophagoscopy.

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**INTRODUCTION:** Accidentally ingested foreign bodies lodged in aero-digestive tract makes the commonest medical – surgical emergency in the otorhinolaryngological practice. [1,2,3] Some foreign bodies have been well documented among the objects that normally get impacted in the throat.

Foreign body ingestion can occur accidentally in normal people, or in mentally ill and challenged individuals. [4] Over 90% of the ingested foreign bodies pass through the gastrointestinal tract without any problem and symptoms appear only when they become lodged in tonsils, base of tongue, crico-pharynx or down. [3] The diagnosis is based on history, radiography, and direct endoscopy. Classically oesophageal foreign bodies present with dysphagia, while that of tracheo-bronchial tree present with dysphoea and stridor. The diagnosis is often complicated by parental ignorance, lack of clear positive history and negative roentgenograms etc. [5] The diagnosis sometimes delayed until appearance of serious complications.

The treatment of choice is endoscopic retrieval under general Anaesthesia.

The cases which we are reporting(1) A large blunt cap of a pen in retro-molar area.(2) A long piece of fish bone in crico-pharynx affecting the movement of the vocal cord.(3) A pendent of necklace in crico-pharynx.

**CASE REPORT 1:** A cap of a pen, a blunt object is rarely impacted inside the tissues of retromolar area of oral cavity. A 12 year old girl came in emergency with complains of restricted and painful mouth opening for 2 days. On detailed history, her father told that 2 days back, while playing with her friends, she kept a pen inside the oral cavity.

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She suddenly fell down and started bleeding from oral cavity. He also noticed presence of a pen without cap. She developed pain during mouth opening and it was progressive.

Oral cavity examination showed trismus and swelling in retromolar trigone area with tiny bluish hard object, suspected foreign body, in the retromolar area.

The foreign body was removed under local anaesthesia in emergency. Patient was alright postoperatively. (Figure 1)



Figure 1: Cap of pen after removal

**CASE REPORT 2:** A 35-year-old patient came in the outpatient department with complaint of pain in throat after fish eating last night. On X-rays neck lateral view suggested foreign body in cricopharynx. (Figure 2) On video laryngoscopy, there was decreased movement of right vocal cord and swelling in right post cricoid area. On Oesophagoscopy under general anaesthesia, a long piece of fish bone piercing the cricopharynx was found. That was removed successfully without complications. Pt was all right postoperatively. (Figure 3)

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Figure 2: X-Ray Neck (lateral) showing a fish bone in hypopharynx

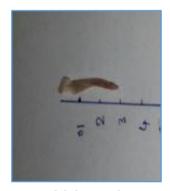


Figure 3: Fish bone after removal

**CASE REPORT 3:** A child of 9 month of age was brought by his parent in emergency. Pt was asymptomatic. His parents gave the history of foreign body ingestion. He told that while playing the elder brother put a pendent of necklace into his mouth. On x-rays, metallic foreign body present in cricopharynx. Foreign body was removed under general anaesthesia with rigid oesophagoscopy. Postoperative period was uneventful. (Figure 4)



Figure 4: X-ray showing foreign body (pendent of necklace) impaction in cricopharyngeal region

**DISCUSSION:** Foreign body impaction in the upper airway and digestive tract has been a problem since the earliest of reported history. The foreign body was defined by Jackson as an object or substance foreign to the location. He classified them as exogenous and endogenous according to their location.

Children have tendency to take foreign bodies, such as coins, buttons, marbles, crayons, parts of toys etc., in their mouths.<sup>[6,7,8]</sup> Coins are the most common foreign body

ingested by children,<sup>[9,10]</sup> while Fish, meat and chicken bones, dentures, nails etc. are the most common foreign bodies ingested by adults.<sup>[11,12,13]</sup> For instance coins are normally given to children when going to school and other outings. Bones of fish, meat and chicken are found in some of our foods and thus commonly impacted. Dentures likewise are prosthetics fixed in place of lost tooth/teeth and they can incidentally be swallowed. Metallic springs, key holders and fish hook are uncommonly ingested because these are less interacted with.

The severity of the symptoms depends upon the site, size, composition and period for which the foreign body has been present. It can be life threatening and needs early intervention accordingly. Oesophageal foreign body presents with acute dysphagia, choking, gagging, drooling and regurgitation. While, bronchial foreign bodies cause dyspnoea, tachypnoea, stridor, cough, change in voice and cyanosis. Diagnosis sometimes becomes difficult because of the unclear history, non-characteristic clinical features or radiological findings.

In all cases, that be usual and unusual foreign bodies in the throat the management seemed to be in the same modality i.e. endoscopic removal mostly the rigid one.

Some literatures justify the use of flexible endoscopy in the management of some of these obscure foreign bodies having uncharacteristic presentations, [14] because of the better patients comfort, a significantly lower rate of dysphasia and lower severe complications. In these reports rigid oesophagoscopy was performed in all cases due to unavailability of flexible oesophagoscopes.

Complications like mediastinitis, interstitial emphysema, retropharyngeal abscess and oesophageal abscess are seen in cases of foreign bodies of the oesophagus due to delayed presentation, type and location of foreign body and their radiolucency. Complications with radiolucent foreign bodies especially fish bones in the region of pharynx are more common in old people.<sup>[15]</sup>

**CONCLUSIONS:** It is necessary to create the awareness of those objects, either usual or unusual, that have tendency to be impacted in the aerodigestive tract, so that they can be handled carefully by adults and their safety from children can also be ensured.

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