

Management of Foreign Bodies in Otorhinolaryngology

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ABSTRACT

Foreign bodies in the ear, nose, and throat are commonly seen, usually in children. Diagnosis is often delayed because the causative event is usually unobserved, the symptoms are nonspecific, and patients often are misdiagnosed initially. Most ear and nose foreign bodies can be removed by a skilled physician in the office with minimal risk of complications. Pharyngeal or tracheal foreign bodies are medical emergencies requiring radiological and surgical intervention. Flexible or rigid endoscopy usually is required to confirm the diagnosis and to remove the foreign body. Physicians need to have a high index of suspicion for foreign bodies in children with unexplained upper airway symptoms

Key words: Foreign body, endoscopy,

INTRODUCTION

A foreign body is an object which is swallowed or stuck in a body opening, such as the ear, nose, or throat. Foreign bodies impacted in the ENT are a common occurrence. Most foreign bodies are seen in children who frequently swallow coins in addition to other objects¹; intellectually challenged or mentally ill adults are also at increased risk.² A person of any age could have a foreign body, but it is most common in ages 1-3 years. An unbelievably large number of things can be encountered as foreign bodies. It leaves one wondering how it is even possible that such things enter the body. Small, interesting, shiny objects are likely to attract children's attention and could easily become foreign bodies.

In the nose, metallic objects like screws, nuts, ball bearings, beads, thermocol pieces, pulses, seeds, buttons, small parts of toys, leaves etc. can enter. Similarly, beads, pulses, match sticks, cotton, polythene pieces to insects, accidentally enter the ear. Swallowing without proper chewing, i.e. eating in a hurry, talking while eating can end up in foreign bodies in food passages. Those with dentures, especially full dentures are more likely to swallow bone, due to reduced sensitivity, and inability to chew properly. Adults fall victim sheer out of negligence, playing around with the foreign body, usually common pin or a staple or needle, in the mouth, especially while working.³ Foreign bodies of the larynx fortunately are relatively uncommon.⁴ Those impacted in the larynx will require extraction under general anaesthesia. Those that are impacted, require immediate removal and re-establishment of the airway by intubation or tracheostomy in certain cases. Radiography can be helpful in localizing coins,

button batteries, and other radiopaque objects, but most throat foreign bodies, including fish bones, are radiolucent.⁵ Therefore, the decision to pursue surgical intervention should be based on the patient's history and a physical examination that suggests the presence of a foreign body rather than based on radiography alone. Most ear and nose foreign bodies can be removed by a skilled physician with minimal risk of complications. Multiple attempts at removal of ear foreign bodies are associated with increased risk of pain, bleeding, patient anxiety, loss of cooperation, and serious otologic complications.⁶ Common removal methods include use of forceps, water irrigation, and suction catheter. Foreign bodies present in the canal for more than 24 hours are not at higher risk of failed removal or complications.⁷ Pharyngeal or tracheal foreign bodies are medical emergencies requiring surgical consultation. Foreign body in the esophagus is a condition where early removal by rigid esophagoscopy is recommended which is a safe and effective procedure.⁸

METHODS

We describe our experience with ENT foreign bodies in children as well as in adults. A retrospective study was conducted on 1113 consecutive patients presenting with suspected foreign bodies in the ear, nose or throat to the emergency department of ENT unit II, SIMS, Services hospital, Lahore over a period of 3 years from July 2007 to July 2010. The patients were subjected to thorough history, clinical examination and radiological investigation of the neck and chest. Rigid pharyngo-oesophagoscopy and removal under general anaesthesia was carried out where indicated.

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RESULTS

A total number of 1113 cases were seen. There were 684 males (61.5%) and 429 females (38.5%). Their ages ranged from 6 months - 78 years. F.B Ear were 579 cases (52%), F.B Nose were 312 cases (28%) and F.B Throat were 222 cases (20%). Cases done under General Anaesthesia; F.B Ear 134 (23% of Total Ear F.B), F.B Nose 10 (03% of Total Nose F.B) and F.B Throat 84 (38% of Total Throat F.B). Twenty two previously attempted foreign bodies ear had ruptured tympanic membranes. In three cases there was mild per-operative bleeding. In nine cases the endoscopy was found out to be negative; out of those four cases the foreign body passed downward into the stomach.

CONCLUSION

Common F.B Ear were Pellets, Beads, Insects, Flies, Erasers, Cotton, and Soap pieces while common F.B Nose were Pellets, Beads, Erasers, Screws, Earring tops and Paper. F.B Throat were found to be Fish bone, Chicken bone, Denture, Needle, Meat bolus. Coins were the commonest foreign body throat whereas Plastic pellets were the most common foreign body ear occurring mainly in the paediatric age group followed by bones and meat bolus in adults. Foreign body inhalation is found to be more common in male patients, mostly below five years of age. Pharyngo-oesophageal foreign body impaction is the commonest indication for emergency surgical endoscopy. The presence of a foreign body is naturally distressing. It is better to teach how to prevent such an eventuality. Public awareness through media, schools and health professionals is recommended. Infants and young children should be kept under surveillance all the time. Wallowing without proper chewing, i.e. eating in a hurry, talking while eating should be avoided. People with dentures should be more cautious as they are more likely to swallow bone, due to reduced sensitivity, and inability to chew properly. Public should also be made aware of the consequences and patient should be asked to consult the ENT professionals in the first instance.

Table 1. Factors determining removal of foreign body ear

Favourable Factors	Difficult Factors
Location in the lateral half of canal	Location beyond isthmus
Small, graspable and light objects like paper, foam, cotton	Ungraspable (large spherical), Dense (rock) or large object
Cooperative patient	Un-cooperative patient
Availability of proper instruments & light	Unavailability of proper instruments & light
Clean ear canal without skin edema	Presence of blood or ear canal skin edema (Previously attempted; perforated Tympanic membrane)
Availability of expertise	Inexperienced practitioner or unavailability

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