



CAN IT GET BIGGER THAN THIS, FOREIGN BODY- AERODIGESTIVE TRACT.

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ABSTRACT

Foreign body aero digestive tract is commonly seen in children, however encountering a foreign body in adults is not uncommon. Patients suffering from psychotic disorders are often prone to have accidental ingestion of foreign bodies. Adequate history, prompt diagnosis, timely intervention and surgical skill and understanding the nature of the foreign body is the key to prevent complications in cases of critical foreign bodies like, key chain.

KEYWORDS

Foreign body, aerodigestive tract, key chain, psychotic disorders

Introduction:

Foreign body ingestion is a medical emergency commonly encountered in pediatric patients from the time they are born to 3 years of age, children usually swallow foreign bodies like coins, batteries and plastic toys. Foreign bodies in adults are relatively uncommon but has higher incidence in the elderly age group and those with psychotic or physiological gastrointestinal disorders. The most common foreign bodies seen is fish bone followed by chicken or mutton bones and dentures however there are some rare incidence of ingestion of foreign bodies like metallic screws, needles, key holder, metallic coil, fish hooks, thermometer, tooth brush and also scissors^{2,3,4}. Pharyngeal and tracheal foreign bodies are medical emergencies needing prompt management. Delay in diagnosis and treatment could lead to complications most common being pulmonary complications in children and retropharyngeal abscess in adults. If not managed with skill can be fatal.⁵

Case Report:

A 34 year old lady who had been suffering from a psychotic disorder, presented with respiratory discomfort and difficulty in swallowing for both liquids and solids. History of ingestion of a metallic key holder along with pair of keys was obtained from her relatives on blandishment. On examination, the general condition of the patient was restless, vitals were stable and no stridor was heard. Patient was comforted and X ray –soft tissue neck AP and Lateral view was obtained, a radio opaque foreign body shadow giving a picture of pair of keys with its key holder was seen just posterior to the airway between level C3 to C7. Patient and the attendees were counseled regarding the nature and the risk of endoscopic foreign body removal under general anesthesia and the surgery commenced. On oesophagoscopy the foreign body was partially visualized occupying both the pyriform sinus and the cricopharynx the distal extent of the foreign body could not be assessed. After a great deal of maneuvering with the help of a Macintosh laryngoscope better visualization was finally obtained and the keychain was removed with the help of Maggil forceps in toto. No major trauma was caused to the mucosa. The approximate length of the key chain holder with its keys was 10 cm. Patient received necessary post operative care in the medical intensive care unit, the post operative period was uneventful. Post 24 hours X ray neck AP and lateral view was obtained and found to be normal. Patient was discharged in stable condition.

Picture 1



Picture 1.X-ray Neck Anterior posterior view



Picture 2.X-ray Neck lateral view.



Picture 3.Foreign body Key chain.

Discussion

Foreign body ingestion is a common medical emergency encountered globally, however 80 to 90 % of the foreign body or impacted food bolus have been reported to pass out of the alimentary tract without causing much harm.⁶ Toddlers often ingest foreign bodies as their 2nd molars are not developed, poor swallowing mechanism and immature glottic closure adds to the risk.⁷ Patients with personality disorder ingest foreign bodies as a form of malingering to gain sympathy from their peers, it could also be due to their delusional believe or to obey the command of their hallucination.⁸ In adults foreign bodies are the result of accidental ingestion along with certain pathological changes of the gastrointestinal tract. Our patient was a lady in her early thirties challenging a psychotic disorder.

There is significant morbidity and mortality that occurs due to impacted and retained foreign bodies. Common sites of impaction or perforation of sharp foreign bodies occur at junctions of intestinal narrowing most common being the upper esophagus, followed by the middle esophagus, stomach, pharynx, lower esophagus and lastly the duodenum. The most common presenting symptoms of foreign body in the esophagus would be difficulty in swallowing, painful swallowing, pain in the retrosternal region, foreign body sensation in the throat with retching and vomiting. Aspiration of the foreign body can cause choking or even stridor. Often, once the foreign body has passed the esophagus the throat discomfort and dysphagia persists for several hours and does mimic a foreign body impaction.⁹ History is imperative for the diagnosis of foreign body. In our patient, after obtaining detailed history and clinical examination a radiographic film was obtained confirming the presence of a foreign body in the aerodigestive tract. If a conclusive history is not obtained in cases of psychiatric patients or young children a plane film radiograph should be obtained as the first diagnostic modality. If radiographic studies are negative because of the foreign body being radiolucent, CT scan or endoscopy are the diagnostic modalities. Conversion of CT data to 3D imaging aids in rapid prototyping and planning the surgery.¹¹ The use of contrast medium in diagnostic evaluation is not advised, because of the risk of aspiration and concealment of the foreign body. Ultrasound is rarely used as a diagnostic modality in such cases. Some authors have used hand held metal detectors to diagnose swallowed metallic foreign bodies.¹² Flexible or rigid endoscopy is the treatment modality of choice for most patients. We proceeded with oesophagoscopy, visualized the keys and the key chain at the level of the pyriform sinus and the upper part of the oesophagus and finally removed the same with Magill forceps technique. Singh et al has concluded in their study that this technique is at par with rigid esophagoscopy in term of efficacy, safety and rate of complications with an advantage of reduced hospital stay and cost of treatment.¹³ Open surgeries is rarely performed. It is indicated in longstanding impacted foreign bodies with granulations or cases with perforation¹⁴.

Conclusion:

Foreign bodies in the aerodigestive tract need to be managed with care and precision. Eliciting a detailed history is an art, one need to have a sympathetic ear to psychologically challenged patients and always have a suspicion of foreign body when they present with complaints of dysphagia, odynophagia and pooling of saliva in the mouth. Timely management, good surgical skill and coordination between the surgeon and the anesthetist is required for optimum results. Magill forceps technique is a simple and effective method of using basic available tools for management of upper aero digestive foreign bodies, better community education and teaching programs for families of patients challenging personality disorders might aid in the management.

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