Case Report:
Neglected Foreign Body in the Esophagus of a Child

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Abstract

Background: Impacted foreign body in the esophagus is a common emergency, especially among children.

Case Report: We report a case of 7-years old girl with neglected long-standing foreign body impacted in the esophagus for 2 years. She was misdiagnosed and treated as dysphagia related to gastroesophageal reflux disease, though her parents gave a definite history of foreign body (coin) ingestion. The foreign body could be identified by radiological assessment and it was removed by a rigid esophagoscope without complications.

Conclusions: The history of ingested foreign bodies should never be ignored by the physician, especially when the victim is a child. Radiological assessment is important to identify radio-opaque foreign bodies and should never be missed in such cases. Referral to an otolaryngologist is recommended when the general practitioner is unable to manage a case of ingested foreign body.

Key Words: Foreign body ingestion – Dysphagia – Children – Esophagoscope.

Introduction

A “foreign body in the esophagus” is not an uncommon condition. Different varieties of foreign bodies have been removed from the esophagus, e.g., coins, bone pieces, nails, buttons, glass pieces, dentures, toys, pins and needles [1].

It is usually seen in children who, while playing, accidently swallow foreign body. Patients typically present to an emergency department with chest or throat discomfort, dysphagia or odynophagia, and difficulty managing oral secretions [2].

Esophageal foreign body impaction can be associated with serious consequences, e.g., caustic injury [3], esophageal perforation [4], or aorto-esophageal fistula formation [5].

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any radiological assessment to her condition. The physician told them that he could not detect any abnormal findings, and he diagnosed her condition as “hysterical” and tried to assure her. So, the parents had to disbelieve their daughter’s story. However, the child then developed severe dysphagia for about 2 months, after which she started to tolerate soft and liquid diets.

One year later, the girl’s complaint was still present. So, the parents went to a primary health care center. However, the general practitioner, again, misdiagnosed her condition as “gastroesophageal reflux disease”, for which she started to get treatment. However, the girl’s complaint did not improve and her dysphagia continued till she presented to our clinic.

At our clinic, general examination was unremarkable, a part from being underweight. There was no drooling of saliva. The girl had no associated chronic disease or symptoms of respiratory distress or hoarseness of voice. Results of ear, nose and throat examinations were all within normal.

Neck and chest X-rays (PA and lateral views) showed round radio-opaque foreign body at the upper third of the esophagus (Fig. 1).

Immediately, the patient was kept on nothing by mouth (NPO), admitted to the General Pediatrics Ward and a written consent was obtained from her parents for undergoing rigid esophagoscopy to their daughter.

In the operation room, under general anesthesia with endotracheal intubation (size 5.5 cuffed tube), with supine position and extended neck, a rigid esophagoscope (size 8x12x300mm) was used and a foreign body was identified about 14cm from the upper incisor teeth (Fig. 2-A). Granulation tissue at the sides of foreign body impaction was seen, without mucosal tear or perforation (Fig. 2-B). The foreign body was easily removed without resistance and it proved to be a small rounded coin 2cm in diameter (Fig. 3).
Postoperative care included monitoring of vital signs and an X-ray done 6 hours after the operation showed normal findings. The patient was vitally stable and was allowed to take food orally after 24 hours. Then she was discharged after 48 hours in a good condition.

Follow-up after 6 months at the ORL-HNS Clinic showed that the girl had no more dysphagia and her body weight became normal for her age.

Discussion

A foreign body in the esophagus is a common emergency with an estimated annual incidence in the US of 11 per 100,000 persons [11], and resulting in up to 1,500 deaths per year [12]. Severity of symptoms depends upon size, type, site and period for which foreign body has been lodged [1].

Our case was a 7-years old girl who had dysphagia after ingestion of a coin that has been neglected for two years.

Verma et al., [1] stated that the maximum incidence of foreign body in the esophagus is usually observed during childhood. It is recommended that in every child with a history of dysphagia, a detailed inquiry of suspected foreign body ingestion must be obtained from each family member.

The correct diagnosis of our case has been missed by several physicians. One physician misdiagnosed her condition as “hysterical” while the other misdiagnosed it as “gastroesophageal reflux disease”. Both physicians totally ignored the girl’s claim of ingesting a foreign body. Moreover, the first physician evaluated the girl by fiber-optic examination of the upper airway, but none of those two physicians cared to conduct radiological assessment for her.

Verma et al., [1] stated that every patient presenting with a history of foreign body ingestion, even when physical and radiological examinations are negative, should be subjected to endoscopic evaluation within 24-36 hours. Most foreign bodies are radio-opaque and will be ready recognized on plane radiographs. However, some foreign bodies, e.g., fish bone or pieces of plastic or wood, are only faintly radio-opaque and their detection may require CT scan.

In our tertiary care hospital, under the supervision of ENT consultants, the definite diagnosis was easily settled after performing neck and chest X-rays, which showed a round radio-opaque foreign body at the upper third of the esophagus. Consequently, a rigid esophagoscope was used to identify the location of the foreign body and to remove it.

Byaruhanga et al., [13] noted that medical officers at peripheral units are advised that any patient with a history of ingesting a foreign body should be investigated with a baseline chest X-ray before discharging them. This procedure is important to prevent delays in making a diagnosis and risks of perforation. Verma et al., [1] added that every patient presenting with a history of foreign body ingestion, even when physical and radiological examinations are negative, should be subjected to endoscopic evaluation.

In conclusion, a history of ingested foreign bodies should never be ignored by the physician, especially when the victim is a child. Radiological assessment is important to identify radio-opaque foreign bodies and should never be missed in such cases. Referral to an otolaryngologist is recommended when the general practitioner is unable to manage a case of ingested foreign body.
References


