Oesophageal foreign body: an unusual presentation

M OYEWOLE¹, O AJAYI², A HILGER²

¹Department of Surgery, Hillingdon Hospital NHS Foundation Trust, Uxbridge, and ²Department of Otolaryngology, Ipswich Hospital, UK

Abstract

Objective: This paper describes and discusses the case of an oesophageal foreign body, in which the patient presented with primarily respiratory clinical signs.

Case report: A 17-month-old child, who had ingested a watch battery, presented to emergency services on multiple occasions with upper respiratory tract symptoms. Subsequent radiographs showed the battery in the oesophagus impinging on the trachea. The battery was removed successfully under a general anaesthetic.

Conclusion: Large oesophageal foreign bodies can impinge on the trachea causing upper respiratory tract signs. In such cases, anteroposterior and lateral chest films are imperative to make a correct diagnosis.

Key words: Esophagus; Child; Foreign Bodies; Pediatrics; Diagnosis

Introduction

The natural inclination of children to explore their environment orally makes the ingestion of foreign bodies common, especially in those less than four years old. The majority of foreign bodies that enter the oesophagus will continue through the gastrointestinal tract without intervention. However, a small percentage of children require either medical or surgical input to prevent serious complications. In such cases, the patient will typically present with symptoms of dysphagia, drooling, cough and wheeze. There may be serious consequences if such cases are not treated, ranging from ulceration to fistulae.

Case report

A previously healthy 17-month-old boy was brought to the emergency department with coryzal symptoms and minor drooling. He was observed in the department and remained well. Examination was unremarkable and he was discharged home.

Five months later, he was returned to the emergency department. On this occasion, his parents reported that he had been wheezing since his initial presentation. They observed that over the previous 2 days he had been coughing and refusing solid food. They also reported a new 'dipping in the chest'. Direct questioning revealed that his breathing was worse at night. In addition, he had been snoring since his initial presentation.

Examination revealed tracheal tugging and an inspiratory wheeze. Examination of the mouth showed enlarged, non-infected tonsils. There was no drooling. Following a specialist ENT review, a diagnosis of long-term upper airway obstruction secondary to enlarged tonsils was made. He was treated with antibiotics and corticosteroids. An out-

patient appointment was scheduled with a view to possible tonsillectomy and adenoidectomy.

The infant experienced five similar episodes, and was given multiple courses of antibiotics and steroids in response to suspected tonsillar inflammation. However, seven months after his initial presentation, he returned to the emergency department. A similar history of wheeze and intolerance to solids was reported. His case was discussed and a chest X-ray was ordered. An anteroposterior radiograph (Figure 1) showed a 2 cm, coin-shaped foreign body in the upper region of the neck. A subsequent lateral radiograph (Figure 2) revealed that this object was in the oesophagus.

The boy underwent emergency surgery under general anaesthesia. A 2 cm, corroded battery was removed from the upper oesophagus. Rigid oesophagoscopy revealed irregular mucosa around the battery. There was no obvious stricture or perforation.

Post-operatively, the infant was observed on the ward and initially maintained on intravenous fluids. There were no clinical signs indicative of a perforation (he was apyrexial, with no surgical emphysema or chest pain). The following day he was started on a clear liquid diet and a soft diet was subsequently introduced.

Although a routine follow-up appointment was scheduled, no clinic appointments were attended. However, we were able to contact his mother by telephone, and she confirmed that the infant was well and she had no further concerns. There were no reports of subsequent hospital attendances related to this episode.

Discussion

This case report describes an unusual presentation of a foreign body in the oesophagus. The clinical notes, with

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FIG. 1

Anteroposterior chest X-ray showing a foreign body in the neck.

the exception of those from his initial presentation, repeatedly stated that the infant had shown no obvious drooling. His mother revealed that although he was unable to tolerate solids, he was consuming enough formula milk to maintain a healthy weight.

- Foreign body ingestion is common in children
- Where a foreign body lodges in the oesophagus, the most common site of impaction is at the level of the cricoid
- Large objects in the oesophagus that push onto the trachea can cause respiratory symptoms

There have been an increasing number of reports published on the overuse of radiation investigations in children. However, it is important to remember that the aim is always to use the right investigation in the right patient at the right time. In the case described here, the cause of the patient's respiratory symptoms was only identified once the angled position of the battery in the oesophagus (which was putting pressure on the trachea) was observed on a

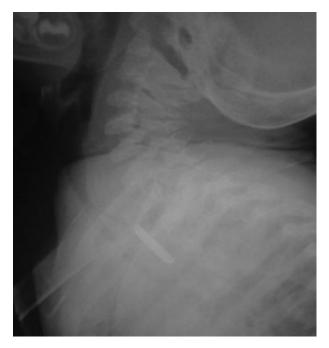


FIG. 2
Lateral chest X-ray showing object in the oesophagus.

chest radiograph. In such cases, a lateral chest radiograph is imperative in order to correctly identify the location of a foreign body.

References

- 1 Cheng W, Tam PK. Foreign-body ingestion in children: experience with 1,263 cases. J Pediatr Surg 1999;34:1472-6
- 2 Singh BH, Kantu M, Har-El G, Lucente FE. Complications associated with 327 foreign bodies of the pharynx, larynx and esophagus. Ann Otol Rhinol Laryngol 1997;106:301–4
- 3 Nandi P, Ong GB. Foreign body in the oesophagus: review of 2394 cases. *Br J Surg* 1978;**65**:5–9
- 4 Leong HK, Chan R. Foreign bodies in the upper digestive tract. Singapore Med J 1987;28:162-5

Address for correspondence: Dr M Oyewole, Department of Surgery, Hillingdon Hospital, Pield Heath Rd, Uxbridge UB8 3NN, UK

Fax: 0208 534 7951

E-mail: molola.oyewole@doctors.org.uk

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