CASE REPORT

Dysphagia caused by a foreign body

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A boy with a long history of dysphagia attributed to neurological impairment was shown to have a large oesophageal foreign body. It had remained undetected for five years as a central lumen allowed the passage of liquids and semisolids. Foreign bodies must be excluded in children with dysphagia.

An 11 year old boy presented to his local hospital with a history of swallowing difficulties, including bouts of regurgitation. As he had moderately severe learning difficulties it was difficult to determine the exact duration of the symptoms, but his mother reported his problems with swallowing began when he was about 5 years old. He had also suffered repeated chest infections during this time. He was known to have congenital cytomegalovirus infection, common variable immunodeficiency, and developmental delay.

A pharyngo-oesophagoscopy was performed which was reported as normal and the patient's symptoms seemed to settle. Four months later he presented to the accident and emergency department with recurrence of the dysphagia and subsequently underwent a repeat pharyngo-oesophagoscopy, described as normal to approximately 25 cm. His symptoms persisted and he underwent an elective upper gastrointestinal

endoscopy. The endoscopist was unable to pass the gastro-scope beyond 20 cm and described an area of narrowing in the lower oesophagus with "ridges of mucosa" covering the area. A barium swallow confirmed narrowing in the lower oesophagus but could not establish a cause. An oesophageal tumour or an incorporated foreign body were considered. The patient was referred to our hospital for a surgical opinion, at which time he was unable to swallow solids and had lost weight.

The barium swallow was repeated, attempting to clarify the nature of the problem. Barium appeared to flow through the central channel of a faintly radiopaque object lodged at the gastro-oesophageal junction. The object had two points at its lower end and a convex upper border over which the barium spilled (fig 1). Computed tomography confirmed the presence of the foreign body, showing it to be intraluminal with no extraluminal or soft tissue component. Cross section of the object showed a central circular hole consistent with a central channel and asymmetric main part; 3D reconstruction showed its configuration (fig 2). It measured approximately 1000 HU, consistent with plastic or hard rubber.

On the basis of this the child underwent endoscopy and the foreign body was easily and safely extracted. A pencil eraser made of pink rubber in the shape of a cat with a ridged surface representing the fur was retrieved (fig 3). It had been in the oesophagus head first with the ears representing the two points seen on the barium swallow. Presumably it had been on the pencil the correct way up and had been swallowed head first as the child chewed on the pencil. His symptoms were immediately relieved.

Children commonly swallow a wide range of foreign bodies, but frequently this is not witnessed and the child is unable to give a history.^{1,2} Not all foreign bodies are radiopaque on plain radiography and missed foreign bodies

Figure 1 Barium swallow. A radiopaque filling defect is shown in the lower oesophagus. Barium passes through a central channel. Two "ears" are seen inferiorly. The rubber cat has been swallowed head first.

Figure 2 Computed tomography scan. 3D reconstruction shows the orientation of the object. The facial features can be delineated. Conventional cross sectional slices had confirmed the object to be wholly intraluminal.

Figure 3 (A) The extracted rubber cat (pencil eraser). The pink ridged surface mimicked oesophageal mucosa at endoscopy. (B) An inverted lateral view shows the orientation compared with the barium swallow (fig 1).

may have serious consequences.³ A long history does not exclude the diagnosis of an ingested foreign body.^{3,4} The

onset of dysphagia and regurgitation in children, particularly in those with learning difficulties, demands the absolute exclusion of a foreign body before being attributed to an oesophageal motility disorder.^{4,5}

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