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Spontaneous intramural oesophageal dissection

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Spontaneous intramural dissection of the oesphagus is a rare condition. In this report we describe a patient with this lesion who was managed successfully without operation. As well as demonstrating the characteristic radiographic and endoscopic features, our case suggests that the ingestion of solid unmasticated food may be an important aetiological feature that has not been emphasised in previous publications.

Case report

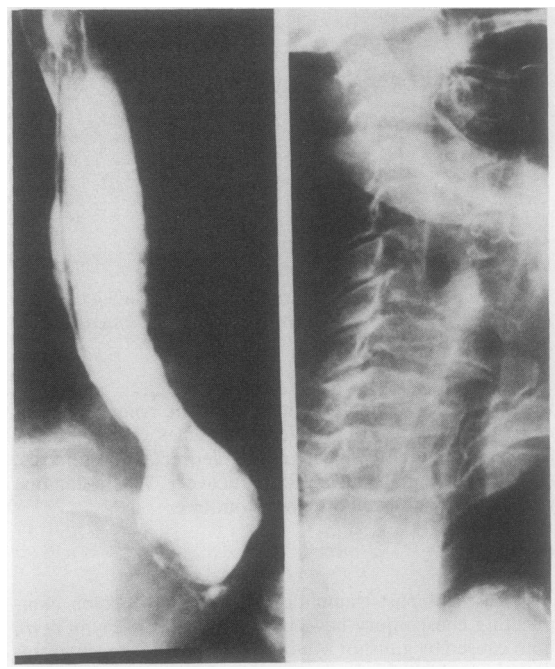
A 70 year old edentulous woman presented as an emergency, complaining of acute onset of severe and worsening retrosternal pain. At lunchtime on that day she had eaten quickly a piece of lamb. She felt the food stick at the level of her manubrium and within a few minutes developed chest pain radiating from the manubrium to the epigastrium. She then vomited—initially clear fluid, followed by bright red blood in increasing quantities. Swallowing was noticed to exacerbate the pain. Finally the offending piece of lamb was vomited.

On examination the trachea was tender to movement, but there was no surgical emphysema. Chest radiography and auscultation of the chest showed no abnormality. Abdominal examination also showed nothing abnormal. A barium swallow done two hours after admission showed a "double barrelled" appearance (figure). Endoscopy, performed the same evening, showed a mucosal tear posteriorly 15 cm from the alveolar margin, and from this lesion there was a bluish column that extended down to the oesophagogastric junction and looked rather like a single long oesophageal varix.

Administration of intravenous fluids and parenteral broad spectrum antibiotics was started and the patient was allowed nothing by mouth. After 48 hours the odynophagia has subsided and at seven days, after a repeat barium swallow, oral fluids were commenced, followed by return to a normal diet. The patient left hospital after 10 days and at review one month later was symptom free, with no dysphagia or odynophagia.

Discussion

A review of publications on intramural oesophageal dissection has identified only 28 reported cases.[1–13] Two of these followed instrumental or chemical injury, and are excluded from this review. Including our case, there were 13 cases



Barium swallow showing the "double barrelled" appearance of the lumen of the oesophagus caused by intramural dissection.

with radiographic evidence of dissection, while in another 13 only intramural haematoma was demonstrated. In one other reported case a barium swallow showed no evidence of perforation or intramural haematoma, though the history was suggestive of a perforation; the diagnosis was confirmed only at laparotomy.[13]

The appearance of a "double barrelled" lumen on barium swallow (figure) is regarded as being diagnostic. The radiographic appearance in the cases of intramural haematoma was of an intramural filling defect and in four of these cases a double barrelled appearance subsequently developed. This suggests that the initial lesion in some cases is a submucosal haematoma, which progresses to a dissection. The site of dissection was identified in only six

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of the 13 cases by endoscopy and was seldom demonstrated by radiography. Two were in the upper third of the oesophagus, three in the middle third, and one in the lower third.

Delay in diagnosis is a striking feature of these cases, as the diagnosis was made within 24 hours of hospital admission in only nine of the 27 cases. Conservative treatment was successful in 22 cases; the only death in the series occurred in a patient who underwent laparotomy; this and a perforation caused by the endoscope probably contributed to his death. The place of operation in intramural dissection would seem limited to patients who fail to respond to parenteral fluids, antibiotics, and restriction of oral intake.

Of the 27 patients reviewed, 19 have been over 60 years of age (mean 64 years) and 19 were women. A relationship with recent food intake was present in 16 cases and in nine of these episodes of food sticking were clearly described. Our patient was edentulous and not wearing her dentures at the time she swallowed the piece of lamb. The state of dentition has been noted in only one previous case, although the advanced age of most of the patients suggests that this may be a commoner aetiological factor than is realised.

The symptoms of retrosternal pain (especially if initiated by the swallowing of food), odynophagia, and possibly haematemesis should be urgently investigated by a contrast swallow. Identification of the site of dissection by endoscopy is probably of little practical value, but the characteristic appearance should allow recognition of this condition.

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