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View from within: Radiology in focus

Oesophageal intramural pseudodiverticulosis

S. Baer F.R.C.S.,* A. Watkinson M.Sc., F.R.C.S.† (Bristol)

Abstract
A case of oesophageal intramural pseudodiverticulosis is presented and the clinical, pathological and specific radiological features are documented.

Introduction

Oesophageal intramural pseudodiverticulosis (OIPD) is a rarely diagnosed condition presenting with dysphagia. It is a benign, slowly progressive condition diagnosed by the specific radiological appearance on barium swallow.

Case presentation

A 59-year-old machine operator was admitted to hospital with absolute dysphagia following ingestion of a chicken meal eight hours previously. There was a five-year history of progressive dysphagia and on several occasions there had been a sensation of food sticking in the upper oesophagus but the bolus had passed spontaneously on several occasions.

He had previously undergone surgery for peptic ulcer disease. He was hypertensive on medication and a smoker. He also consumed alcohol in moderation.

Examination was unremarkable apart from the finding of some pooling of saliva in the hypopharynx. Overnight the bolus appeared to become dislodged and his ability to swallow liquid and solids returned. A barium swallow (Fig. 1) was subsequently performed which revealed the classical appearance of OIPD which are described later. Pharyngo-oesophagoscopy was undertaken using a rigid endoscope which was passed to 23 cm at which level a stricture was observed. The stricture was dilated successfully using gum elastic bougies.

Discussion

OIPD was first described by Mendl *et al.* in 1960. Subsequently reports appear mainly in radiological journals (Beauchamp *et al.*, 1974; Boyd *et al.*, 1974) have determined the incidence and clinical features of the condition as well as suggesting aetiological factors. There have been sixty-nine cases documented in the world literature with only a single case report in an otolaryngological journal (Shapiro and Sloan, 1977).

The condition is commonest in the fifth and sixth decades although cases have been reported in children. There is a slight predominance of male cases with no obvious racial associations. Presentation is almost always dysphagia, most marked for solids. The diagnosis is made from the radiological findings of multiple smooth, flask or button shaped outpouchings of the oesophageal lumen. The mouths of these outpouchings, can be exceedingly narrow and the overall appearances have been

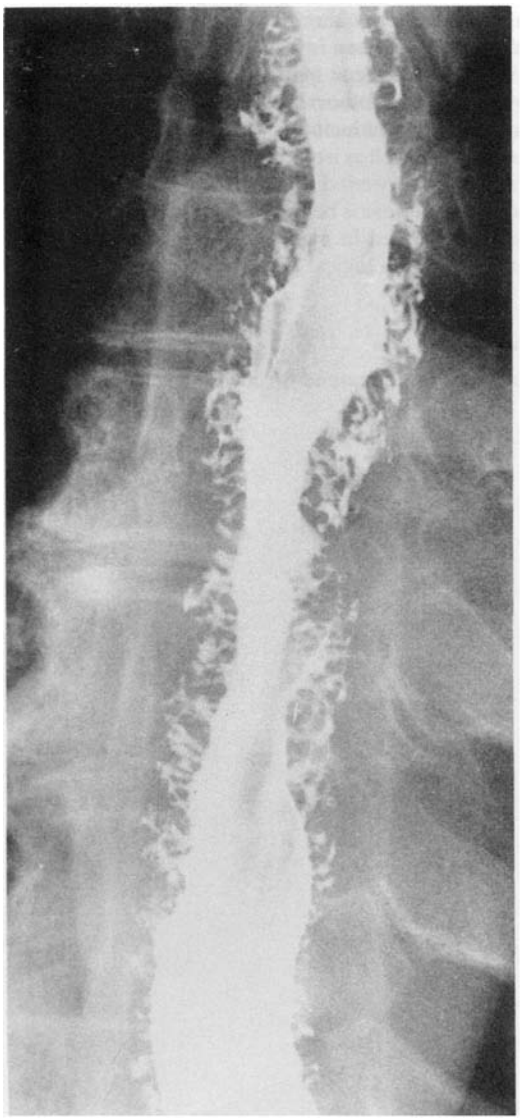


Fig. 1
The oesophagus showing multiple intramural outpouchings throughout its course.

*Department Otolaryngology.
†Department of Radiology, Department of Radiodiagnosis, Bristol Royal Infirmary.

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compared to Rokitansky-Aschoff sinuses in the gall bladder. These pseudodiverticulae measure 2–3 mm in diameter and are intramural.

Endoscopy reveals non specific inflammation on biospy but in 60 per cent of cases strictures in the middle or upper third of the oesophagus have been demonstrated. These strictures are usually very easily dilated.

The pathogenesis of OIPD was originally unclear with Mendl *et al.* (1960) expressing the opinion that the outpouchings represented pulsion diverticulae. More recently workers have demonstrated the pathology in autopsy specimens (Madeiros *et al.*, 1988) and confirmed that the pseudodiverticulae which are found throughout the oesophagus are confined to the mucosa and represent dilated excretory ducts of mucus glands. The same group of workers have shown that the earliest changes of OIPD are quite common in normal oesophagi and these findings lend support to the view that inflammation has an aetiological role in the formation of the pseudodiverticulae. This inflammation probably causes obstruction of ducts with secondary proximal dilatation.

Monilial infection of the oesophagus is an important differential diagnosis, but the view of Castillo *et al.* (1977) that *Candida albicans* when involved represents a secondary colonization, as can occur in the general population, is widely accepted by most authors.

Management will include oesophageal dilation of strictures as necessary, as well as isolation and appropriate therapy to any local inflammatory conditions such as reflux oesophagitis. The course of the disease is benign with no other complication attributed to it, indeed in many cases no treatment is necessary inspite of the radiological appearance.

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Address for correspondence:
Mr S. Baer FRCS
7 Woodstock Avenue,
Redland,
Bristol BS6 6EW.

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