### Case 49 A third patient with difficulty

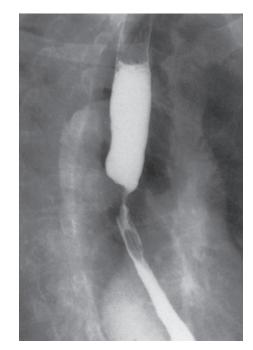


Figure 49.1

### swallowing

The X-ray in Fig. 49.1 shows one plate of a barium swallow series of a 68-year-old retired civil servant, who complained of difficulty in swallowing. He noted that solid foods, but not liquids, were seeming to stick at the lower end of his chest (he pointed to just above his xiphisternum), and this had been getting worse over the past couple of months. There was discomfort when he swallowed, but no actual pain. He had started to avoid eating and believed he had lost several pounds in weight over this time. He smoked 15 cigarettes a day, had a 'smoker's cough' with some mucoid sputum, was a social drinker and had had no serious past illnesses.

Clinical examination in the outpatient department revealed a rather thin anxious man with signs of weight loss. There were crackles at both lung bases, but nothing abnormal to find on examination of the abdomen or supraclavicular region. A chest X-ray and full blood count were normal.

## Describe the X-ray appearance and give the, almost certain, diagnosis

There is a severe obstruction of the mid oesophagus, which is slightly distended above the occlusion. A streak of contrast trickles through the block, to produce a 'rat's tail' deformity. This is the classical appearance of a carcinoma of the middle third of the oesophagus.

#### How is this diagnosis confirmed?

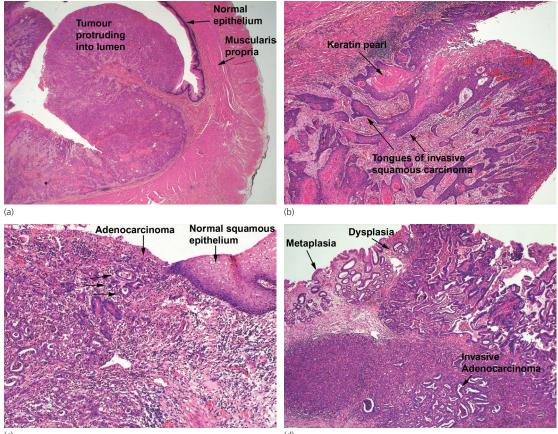
Fibre-optic oesophagoscopy is performed and a biopsy taken of the lesion.

# What is the likely histology of this tumour?

Carcinoma of the oesophagus used to be predominantly a stratified squamous carcinoma arising in the stratified squamous oesophageal mucosa. For no apparent reason the incidence of adenocarcinoma of the lower end of the oesophagus has rapidly increased in the past 25 years and now accounts for about 65% of oesophageal cancers in this country and the developed world. This type of tumour occurs where the specialized squamous epithelium at the lower end of the oesophagus has undergone metaplasia to columnar epithelium as a result of chronic reflux of acid and bile (Fig. 49.2), producing the so-called Barrett's oesophagus (see Case 50, p. 102). The risk of adenocarcinoma is also linked to cigarette smoking, alcohol and obesity.

## What is the curative treatment for carcinoma of the oesophagus?

Only surgery offers the chance of cure. However, this is a major operation, with high peri-operative morbidity and mortality. Assessment of fitness for surgery will include pulmonary function tests, electrocardiogram



(c)

**Figure 49.2** Histology of squamous and adenocarcinoma of oesophagus. Squamous carcinoma at a magnification of  $\times$  2 (a) and  $\times$  4 (b). Note the tumour protruding into the lumen, and the keratin deposits typical of squamous cancers. (c) Adenocarcinoma of the oesophagus where tumour can be seen to arise from adjacent normal squamous epithelium and to possess the typical

(ECG), etc., while contrast-enhanced CT and endoscopic ultrasound are required to determine the stage and spread of the tumour in order to avoid unnecessary surgical exploration. Pre-operative chemotherapy may be used to down-stage the tumour and render it resectable.

(d)

glandular structures (arrowed) of an adenocarcinoma (magnification  $\times$  10). (d) A different tumour showing evidence of mucosal metaplasia with adjacent dysplastic areas and invasive tumour (magnification  $\times$  10). This is typical of Barrett's oesophagus.

#### What about palliative treatment?

This is required in patients with local disease not considered fit for major surgery, those with advanced local disease or with evidence of metastatic spread, and those who have undergone radical surgery but return with recurrent disease.

It is extremely important to relieve the misery of dysphagia in these patients, and this can often be achieved by the insertion of an expandable metal stent. Palliative cytotoxic therapy and radiotherapy may also be employed.