

## Case 69

# A complication of long-standing ulcerative colitis

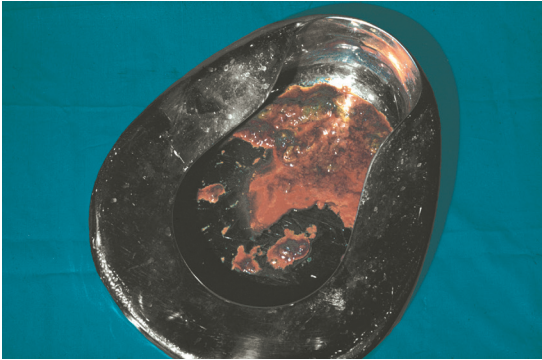


Figure 69.1

A man of 48 years, a self-employed grocer, has been under the care of his family practitioner and the gastroenterology clinic of the local hospital for his ulcerative colitis since he was 25 years old, with intermittent admissions for exacerbations of his disease. Over the years there have been repeated episodes of bloody diarrhoea, with bright red blood on the stools accompanied by mucus. Figure 69.1 shows a typical example of his stool in a bed pan during such an attack, during which he might pass up to 12 stools in the 24 h.

Severe episodes have been accompanied by profound loss of weight, anorexia and anaemia, which often necessitated blood transfusions. Over the years he has been treated with courses of steroids and with sulphasalazine (sulphonamide/salicylate in combination). Over the past 4 or 5 years he has enjoyed a long remission – his bowels acting only two or sometimes three times a day, semi-formed and free of obvious blood. If the bowels became looser, he has simply take some codeine phosphate. His appetite has been good and his weight steady.

However, over the past 3 months his symptoms have flared up again – diarrhoea, bleeding, mucus, weight loss and loss of appetite. Both he and the GP assumed that this was just another tedious recurrence of his colitis. He was



Figure 69.2 Barium enema (see text).

sent back to the clinic by his family doctor to have this sorted out.

When seen by his gastroenterologist he did not look at all well – pale and thin. Abdominal palpation revealed a generally tender abdomen, but no muscle guarding. There was a definite tender mass felt in the lower left quadrant of the abdomen, about the size of a cricket ball. Rectal examination showed bright blood and mucus on the glove but no mass was detected. A sigmoidoscopy was performed in the clinic to 15 cm and this showed a red granular, bleeding mucosa. An urgent barium enema examination was ordered and Fig. 69.2 shows one of the films obtained. The appearance of the arrowed segment was constant on all the films and on the screening.

## Part 2: Cases

### What observations can you make on this X-ray? Together with the clinical features described, what diagnosis (or rather diagnoses) can you make?

The whole length of the colon has lost its normal haustrations and the lumen is narrowed throughout the so-called 'drain-pipe colon'. Fine ulcerations can be seen along the edge of the ascending and part of the transverse colon. There is a long stricture in the lower descending colon.

All this fits with the diagnosis of chronic ulcerative colitis, with carcinomatous change in the strictured segment. Although it is true that non-malignant strictures may occur in longstanding colitis, the presence of a mass on abdominal palpation strongly suggests a tumour.

### What further investigation will be necessary to confirm or refute these two pathologies?

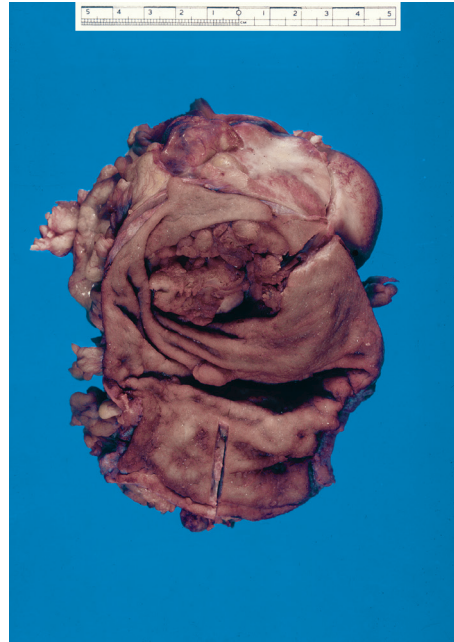
Colonoscopy. This was performed under sedation. Serial biopsies were taken of the rectal and colonic mucosa.

*An ulcerating tumour was seen at 50 cm from the anal verge. A biopsy of this was reported as a poorly differentiated adenocarcinoma. The biopsies taken from other parts of the colon and the rectum showed mucosal ulceration and small abscesses within the mucosal crypts ('crypt abscesses'), together with polymorph and round cell infiltration of the ulcer bases. No giant cell systems were seen. These appearances are typical of chronic ulcerative colitis.*

### Which patients with ulcerative colitis are at particular risk of developing carcinomatous change in the mucosa of the large bowel?

The risk is greatest in chronic, total colitis – it does not occur when the inflammatory disease is confined to the rectum (ulcerative proctitis). It may occur irrespective of whether the disease is quiescent or active and may be multifocal. It is especially likely to take place if the disease commences in childhood or adolescence – but then these are the patients who are likely to have longstanding disease. It is estimated that 12% of patients with colitis of 20 years or more duration may develop malignant change.

### Outline how you expect this patient was managed



**Figure 69.3** Mucosal surface of the tumour-bearing segment of colon.

He was admitted urgently under the care of the colorectal surgical team. His blood count revealed profound microcytic anaemia and he received a blood transfusion. Ultrasonography of the abdomen showed no evidence of ascites or hepatomegaly and his liver function tests were normal; a chest X-ray was also normal.

At laparotomy, a tumour was found in the lower descending colon with enlarged local lymph nodes. The rest of the large bowel showed thickening and narrowing. A total colectomy and rectal excision was performed with ileoanal stapled anastomosis, using an ileal pouch. The mucosal surface of the portion of colon containing the tumour is shown in Fig. 69.3.

Histological examination of the tumour showed this to be a poorly differentiated adenocarcinoma (as suggested by the biopsy), completely penetrating the muscle wall of the bowel. Of the 18 lymph nodes dissected out of the adjacent mesocolon, 12 showed tumour deposits (Dukes' stage C).