Case 68 Ulcerative colitis

A 25-year-old doctor presented to the gastroenterologist of the hospital in which he had just started working with a long history of bloody diarrhoea. He had previously been investigated as a student by flexible sigmoidoscopy and commenced on a course of prednisolone enemas for proctitis. Initially this had reduced his diarrhoea but in the 3 weeks since moving to start a new hospital job he was opening his bowels 12 times a day and passing diarrhoea covered in blood and mucus. He also complained of crampy lower abdominal pain, and a recent weight loss of 8 kg.

On examination, he was pale, pyrexial (temperature 38°C) and tender in the left iliac fossa. No masses were palpable. On rectal examination, there was a granular feel to the mucosa with fresh blood and mucus on the examining finger. A full blood count revealed him to be anaemic (haemoglobin 98 g/L) and hypoalbuminaemic (21 g/L) with a raised C-reactive protein (120 mg/L).

What is the first course of management?

Initial management should aim to make a diagnosis and provide symptomatic relief. Diagnosis requires tissue, which was obtained at rigid sigmoidoscopy and revealed ulceration with blood and mucus in the bowel lumen. Biopsy of the posterior rectal wall was performed. The extent of the disease can be assessed either by colonoscopy or barium enema. Stool culture should also be taken to exclude infective causes, but the previous history of proctitis suggests this was not infective in origin.

What features would suggest this is ulcerative colitis rather than colitis due to Crohn's disease?

Table 68.1 shows the differences between Crohn's colitis and ulcerative colitis. This patient was diagnosed as having typical ulcerative colitis.

What are the complications of this condition?

When considering the complications of any condition it is useful to categorize them into local and general (or systemic).

1 *Local*:
- Toxic dilatation – the colon dilates in fulminant colitis leading to:
- Perforation.
- Stricture.
- Malignant change – usually with longstanding disease affecting the whole bowel.
- Perineal disease, while more common in Crohn's colitis, can occur in ulcerative colitis manifesting with fissure-in-ano, for example.

2 *General*:
- Weight loss, anaemia and hypoalbuminaemia.
- Seronegative arthropathy, such as ankylosing spondylitis.
- Uveitis – both this and the arthropathy occur in patients who have the B27 human leucocyte antigen (HLA B27).
- Skin complications – pyoderma gangrenosum.
- Primary sclerosing cholangitis, which may precede the onset of colitis and which is also associated with Crohn's disease.

What initial medical therapy would be appropriate?

The doctor was commenced on high dose corticosteroids and his anaemia corrected by blood transfusion. Nevertheless his condition worsened and he underwent a total colectomy (Fig. 68.1).

What are the indications for total colectomy in ulcerative colitis?

- Fulminating disease not responding to medical therapy – with the passage of more than six stools per day with persistent fever, tachycardia and hypoalbuminaemia.
- Chronic disease, not responding to medical treatment.

Table 68.1 Differences between Crohn's colitis and ulcerative colitis.

	Crohn's colitis	Ulcerative colitis
Clinical features	Perianal disease common, e.g. fissure in ano and fistula in ano	Perianal disease uncommon
	Gross bleeding uncommon	Often profuse haemorrhage
	Small bowel may also be affected	Small bowel not affected
Pathology		
Macroscopic differences	Any part of the colon may be involved (skip lesions)	Disease extends proximally from the rectum
	Transmural involvement	Mucosal involvement only
	Fistulae into adjacent viscera	Does not fistulate
	No polyps	Pseudopolyps of regenerating mucosa
	Thickened bowel wall	No thickening of bowel wall
	Malignant change rare	Malignant change common in longstanding cases
Microscopic differences	Granulomas present	No granulomas

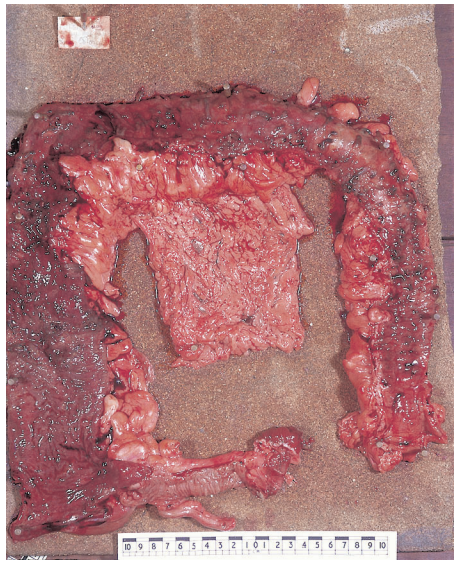

Figure 68.1 Total colectomy.

- Longstanding disease, where colectomy is performed as prophylaxis against malignancy.
- For the local complications mentioned above.

It is often said that patients accept surgery better in fulminant disease, when they perceive anything – including a stoma – as being better than a life spent on the toilet passing bloody stools.

What surgical options are open to this patient?

Total colectomy with excision of the rectal stump is the usual procedure. The remaining small bowel may either be exteriorized as a terminal ileostomy, or continence restored by a ileoanal anastomosis with an interposed ileal pouch (a Park's pouch*). Where the anal disease is controlled an ileorectal anastomosis can be performed, but this will require continued surveillance for malignancy.

*Sir Alan Guyatt Parks (1920–1982), surgeon, St Marks Hospital, London.