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Ulcerative enteritis

The most common cause of ulceration of the small intestine in people of European stock is Crohn's disease, but the differential diagnosis includes tuberculosis, actinomycosis, typhoid, bacillary dysentery, polyarteritis nodosum, ischaemia, neoplasms, and the Zollinger-Ellison syndrome. With these conditions excluded, there remains a syndrome of multiple ulcers of the small intestine, which is variously known as ulcerative jejunitis,[1] chronic ulcerative jejunoileitis,[2] or, preferably, idiopathic chronic ulcerative enteritis.[3] The rarity of the disorder is shown by the relative lack of reported cases. In 1980, Mills *et al*[3] reviewed the 27 cases which had been reported since the first patient described in 1949[4] and added a further five cases. Recently eight more cases have been reported from Leeds.[5]

The subject is confused, mainly because idiopathic chronic ulcerative enteritis is almost certainly heterogeneous. All patients have intestinal ulceration and malabsorption but they may then be divided into four groups: those with proved coeliac disease, those with villous atrophy unaffected by a gluten free diet, those with a normal small intestinal mucosa, and those with a malignant histiocytosis.[6]

The first group is the smallest. Mills *et al* considered only three of the 32 patients they reviewed to have coeliac disease—defined as showing a clinical and histological response to gluten withdrawal.[3] The eight patients recently described from Leeds included two more with coeliac disease, one of whom had a malignant histiocytosis, though there was circumstantial evidence of coeliac disease in the other patients in this series. Only in the patient described by Bayless *et al* was the coeliac disease diagnosed long before the development of small intestinal ulceration: this patient remained symptom free on a gluten free diet for six years before he developed anorexia, loss of weight, and abdominal pain, which heralded the presence of small bowel ulceration.[7] In the other cases of proved coeliac disease radiological evidence of ulceration or stricturing was already present at diagnosis.[5 7 8] Two patients in the Leeds series, however, almost certainly had coeliac

disease, and both had had evidence of malabsorption for up to 10 years before the diagnosis of idiopathic chronic ulcerative enteritis.[5]

The mean age at the onset of symptoms from ulcerative enteritis is about 50, and women slightly preponderate. Patients usually present with chronic symptoms—diarrhoea, steatorrhoea, abdominal pain, and loss of weight. They may have a low grade fever, finger clubbing, evidence of wasting and nutritional deficiencies, and abdominal distension. Complications of small intestinal ulceration, such as haemorrhage, perforation, or obstruction, are common. Investigation invariably shows malabsorption of fat, and most patients have radiological abnormalities of the small intestine. These abnormalities may be non-specific, such as dilatation or thickened valvulae conniventes, or there may be strictures or ulceration. Jejunal biopsy specimens show a variable degree of villous atrophy and may even be normal. A finding of frank ulceration in a jejunal biopsy specimen appears to be rare.[9] Many patients have anaemia, usually due to iron deficiency, a neutrophil leucocytosis, hypoalbuminaemia, and immunoglobulin abnormalities.

Diagnosis of chronic ulcerative enteritis is usually not too difficult except in the occasional patient in whom there are no specific radiological features.[10] In these cases diagnosis is often delayed unless laparotomy is undertaken. Once the diagnosis has been made there are few guidelines for treatment. All patients with an abnormal small intestinal mucosa should be given a gluten free diet and, if no histological response occurs, withdrawal of soy protein or even enteral feeding with an elemental diet may be worth while. Bacterial overgrowth of the small intestine should be looked for and treated with antibiotics. Steroids are often used, but the evidence that they are beneficial is limited and entirely anecdotal. Tight strictures and perforations require surgical management. Whatever treatment is employed the prognosis is poor: of the 40 patients described in published reports, two thirds were dead within three years of diagnosis.

The aetiology of chronic ulcerative enteritis remains unknown. The exact relation to coeliac disease is also not clear. There is often a strong clinical suspicion of coeliac disease, as discussed above, even though definitive proof is lacking. Furthermore, many patients have shown evidence of hyposplenism[3] and six patients from Leeds[7] had the HLA-B8 phenotype. Perhaps the most controversial contention is the nature of the underlying disease process. Isaacson and Wright suggested that malignant histiocytosis may be responsible for most, if not all, cases of ulcerative enteritis.[6] Only three of the eight patients from Leeds, however, were shown to have malignant histiocytosis.[5] On present evidence, therefore, malignant histiocytosis seems to account for only a minority of cases of ulcerative enteritis. Now that pathologists are much more aware of this diagnosis and special strains are available,[11] the pathological features of idiopathic chronic ulcerative enteritis should be examined more critically than has previously been possible.

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Recurrent cancer of the large bowel

Cancer of the large bowel causes some 17 000 deaths each year in England and Wales and is the second most common cause of death from malignant disease. Many patients who die from cancer of the bowel have previously undergone what was hoped to have been a "curative" resection, only to return with lethal recurrent or metastatic disease; some patients in whom surgical cure has been successful will later develop a second, metachronous cancer elsewhere in the large bowel.

Is the picture one of complete gloom, or can painstaking follow up identify these lesions at a stage where further surgical resection is possible and rewarding? Once colorectal cancers could be removed successfully it soon became clear that the remaining large gut might be the site of development of a second tumour.[1] In 1951, Rankin and Conger described seven patients whose second tumours had been resected successfully.[2] By 1958 Moertel and his colleagues could report 261 multiple colorectal cancers among 6012 cases at the Mayo Clinic (4%), of which 157 were simultaneous, 95 metachronous, and nine both.[3] Interestingly, 21 of these 261 patients had, in addition, another tumour elsewhere as well as their two or more colorectal growths.

A review from St Mark's Hospital, London, of 4884 survivors from operations for cancer of the large bowel showed that 83 patients (2%) had operations for metachronous cancers.[4] Eighteen patients had their second cancer diagnosed in the first two years after initial operation, and some of these might have been synchronous tumours missed at the first operation; but among the remainder the average interval between the first and second operations was just over 11 years. The St Mark's report points out the difference in prognosis in patients who developed a second cancer of the large bowel while attending the follow up clinic regularly compared with those who had defaulted or had been discharged. The 41 tumours in the "follow up" group were diagnosed apparently earlier than in most series, and no fewer than 70% were at Dukes stage A or B. By contrast, eight of the 17 patients who were not attending the clinic had inoperable growths at the time of diagnosis. The policy at St Mark's was that patients should be examined by a double contrast barium enema every two years combined with sigmoidoscopy every six months—but that was at a time before the routine use of the