Lymphosarcoma in Crohn's Disease: Report of a Case*

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Since 1956, approximately 40 cases of adenocarcinoma complicating Crohn's disease of the small intestine, sometimes in an excluded segment, have been described. A few nonepithelial neoplasms, including reticulum-cell sarcoma, enteroblastoma, carcinoid tumor, and lymphoma, have also been recorded. We report the case of a patient with Crohn's disease of the small intestine in whom a lymphoma developed five years later.

Report of a Case

A 53-year-old man came to the outpatient department in 1970, complaining of right-sided abdominal pain of two months' duration. Apart from an uncomplicated anterior myocardial infarction 11 years previously, he had been well. He was a painter and decorator, and smoked ten cigarettes a day. Further questioning revealed that his father had died at the age of 62 years of carcinoma of the rectum, after a 12-year history of ulcerative colitis. One of his seven siblings had died of rectal carcinoma unrelated to colitis, and another had had a total colectomy for colitis at the age of 57 years. A niece had died at 37 years of age from carcinoma of the sigmoid colon.

Physical examination revealed no abnormality. Barium studies were not performed, but results of other tests were normal, apart from an erythrocyte sedimentation rate of 33 mm/hr. The patient continued to experience intermittent pain, and was admitted to the hospital in September 1971. He complained of a 29-pound weight loss over the preceding four months. Results of physical examination were normal and the erythrocyte sedimentation rate was 34 mm/hr. Barium meal and follow-through examination showed a 30-cm, narrowed section of mid-jejunum that was ulcerated and appeared to include the skip area previously identified. At laparotomy the jejunum was found to be dilated from the site of the healthy anastomosis down to the stricture. The associated mesenteric glands were enlarged. The involved bowel was resected together with 5 cm of normal bowel on each side and primary anastomosis was performed.

On macroscopic examination the removed bowel was seen to have a mucosa denuded of epithelium and covered by a fibrinous exudate. Histologic examination showed that to be lined by acute inflammatory slough with an extensive transmural chronic inflammatory exudate, but epithelioid granulomas were not seen in the bowel wall or the draining lymph nodes.

The mucosa of the stricture was ulcerated and the associated mesenteric glands enlarged. A skip area, 1 cm long, was present 10 cm below the stricture, involving half the circumference of the bowel but with no associated glands. The stricture was resected together with 5 cm of normal bowel at each end and a primary reanastomosis was performed. The skip area was not removed. Histologic examination of the removed stricture showed the features of Crohn's disease with mucosal ulceration, crypt abscesses, a severe chronic inflammatory reaction with eosinophils and large mononuclear cells, and replacement fibrosis involving all layers of the bowel wall. The ends of the resected bowel were microscopically normal.

Apart from a superficial dehiscence of the abdominal wound, the patient recovered and felt well. In May 1973, however, he started to complain of right-sided abdominal pain occurring after meals, and of nausea. Barium follow-through examination showed a 30-cm, narrowed section of mid-jejunum that was ulcerated and appeared to include the skip area previously identified. At laparotomy the jejunum was found to be dilated from the site of the healthy anastomosis down to the stricture. The associated mesenteric glands were enlarged. The involved bowel was resected together with 5 cm of normal bowel on each side and primary anastomosis was performed.

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The patient remained well until January 1975, when he complained of abdominal pain, anorexia, and loss of 14 pounds over one month. Barium meal and follow-through showed a dilated small-intestinal loop with coarse mucosa in the left iliac fossa. There was no stricture formation. The appearance suggested recurrent Crohn's disease. The patient's symptoms spontaneously regressed.

Nine months later the patient complained of a postprandial bloated feeling around the umbilicus and constant lumbar backache for two months. Examination disclosed clubbing, a trace of ankle edema, a large, painless, hard, fixed mass in the left iliac fossa, ascites, and hyperactive bowel sounds. There was no lymphadenopathy. Hemoglobin was 9.8 g/100 ml, with hypochromic features. Serum albumin was 21 g/l, with an alkaline phosphatase
Fig. 1. Tumor mass extending retroperitoneally to involve both kidneys.

Fig. 2. Small bowel with lymphomatous involvement and extensive necrosis continuous with a mesenteric and retroperitoneal tumor mass.