Severe and extensive enteritis following colectomy for ulcerative colitis

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Ulcerative colitis is an inflammatory condition usually confined to the colonic mucosa. However, inflammatory changes have been recorded in the small bowel with ulcerative colitis, specifically in ileal pouch mucosa after colectomy (ie, 'pouchitis') or in the terminal ileum with severe pancolitis (ie, 'backwash ileitis'). There have also been rare previous reports of a more diffuse and distinctive form of diffuse and extensive enteritis following total colectomy that responded to steroids or calcineurin inhibitor use (1-3). Rarely, a fatal form of diffuse enteritis following colectomy has been described (4,5). We report a dramatic presentation of severe steroid-resistant panenteritis in a patient three months after total colectomy for severe ulcerative colitis that responded to tacrolimus.

CASE PRESENTATION

In 2009, a 43-year-old woman was investigated in another hospital for abdominal pain and diarrhea. Upper gastrointestinal endoscopy and biopsy studies of the stomach and small bowel were completely normal; however, colonoscopy with biopsies demonstrated endoscopic and histopathological changes typical of ulcerative pancolitis. Initially, her colitis responded to prednisone and azathioprine. However, over time, she became more refractory despite treatment with mesalamine, infliximab and certolizumab. This led to a colectomy with an ileostomy in September 2011, with reconstructive pouch surgery planned for a later date.

In January 2012, she presented to the emergency department of the Vancouver General Hospital (Vancouver, British Columbia) with crampy, epigastric pain for approximately one month. In the week before presentation, nausea and vomiting also developed along with an estimated 2.5 kg to 5 kg weight loss. Her bloodwork revealed a mild leukocytosis (white blood cell count 11.4×10^9/L). A computed tomography scan of the abdomen, however, showed diffuse and extensive small bowel thickening (Figure 1). Upper gastrointestinal endoscopy and push enteroscopy showed changes of gastritis and confirmed severe and diffuse enteritis (Figure 2). Biopsies of the duodenum and jejunum documented moderate to severe active inflammatory changes in the small bowel mucosa with cryptitis. There was no intraepithelial
Diffuse ulcerative colitis involving the small bowel rather than Crohn disease should be aware of this distinctive and potentially fatal form of inflammatory disease. Interestingly, although sporadic rare cases from the United States and Europe have been noted after colectomy, several have been reported from Japan (6), raising the possibility that unique genetic or environmental factors play a role. The etiopathogenesis of this severe and diffuse inflammatory process in the small bowel after colectomy is intriguing. A sudden change in inflammatory mediators or inhibitors following cessation of medical treatment of colitis with potent immunosuppressants or biological agents followed by colectomy could have played a role. Alternatively, a ‘graft-versus-host’-like immunopathological process has been suggested (3). Clinicians caring for patients with inflammatory bowel disease treated with colectomy and having the expectation that surgical therapy will be curative should be aware of this distinctive and potentially fatal form of small intestinal inflammatory process.

REFERENCES