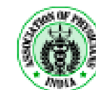

Ulcerative Colitis presenting as Toxic Megacolon

Sir,

In September 2008, a 25 year male presented with complaints of bloody diarrhea, abdominal distension and fever for the last 10 days. No other significant present or past history could be elicited. On examination patient had weak thready pulse of 110/min and a blood pressure of 90/60 mmHg. General examination revealed that patient was pale and dehydrated. There was no icterus, clubbing, pedal edema, cyanosis or lymphadenopathy. JVP was normal. Abdominal examination revealed tense, distended and tender abdomen with masking of liver dullness. These signs were suggestive of perforation. An X-ray abdomen revealed air under the right dome of diaphragm. Blood chemistry revealed hemoglobin of 5g/dl, total leucocytes count of 23,000, urea 110mg/dl, creatinine 2.5mg/dl, total bilirubin/direct bilirubin of 2/1.5 mg/dl, AST/ALT of 200/130 IU respectively. A diagnosis of perforation was made and explorative laprotomy done. Intra-operative findings revealed totally necrosed large bowel with feculent fluid in the peritoneal cavity. A total colectomy, along with peritoneal lavage and ileostomy was done. After postoperative period, patient showed gradual improvement. An ileo-rectal anastomosis was done at a later date. Biopsy of the resected large bowel revealed ulcerative colitis. Patient was given a short course of steroid and then kept in follow up on sulfsalazine. Disease activity is now quiescent and patient is doing fine.

Ulcerative colitis (UC) is disease of multifactorial origin that involves predominantly the large bowel with known extra intestinal manifestations. The presenting symptom complex tends to differ according to the extent of the disease, but generally the severity of the symptoms reflects the severity of the disease. The major symptoms include diarrhea, rectal bleeding, passage of mucus, tenesmus, urgency and abdominal pain. Most patients (80%) have intermittent flares interposed between variable periods of remission. Approximately 5% to 10% of patients follow a chronic continuous phase, and the remainder (10%) present with a severe first attack requiring urgent colectomy. Toxic megacolon is an uncommon / rare initial presentation of UC, but it is a well-recognised complication of this condition, and it results from extension of colonic inflammation beyond the mucosa to the underlying tissues including the muscularis propria. Loss of contractility from the inflammatory reaction leads to the accumulation of gas and fluid within the lumen and subsequent colonic dilatation and it occurs in approximately 5% of severe flare of UC. Perforation, haemorrhage and peritonitis increase the mortality rate in patients with toxic megacolon.

Similar, presentation could also occur with an acute infective diarrhea, UC may present as part of well documented episode of infectious colitis and not only this, patients with documented UC may develop acute infectious colitis and present with symptoms of flare of UC. It is unknown if the infection prompts or simply unmasks underlying UC that previously had subclinical activity. Thus, infections need to be excluded with each episode of disease exacerbation. Patients with infectious colitis usually have a more acute onset of symptoms than do patients with a flare of UC, associated with prominent abdominal pain, and may report with diarrheal illness in contacts. Sigmoidoscopic appearance of infectious colitis may be indistinguishable from that of UC, but the histological appearance usually is helpful in differentiating infectious acute colitis from a more chronic condition.

Currently, there is no single test that allows the diagnosis of UC with acceptable sensitivity and specificity. Thus, the diagnosis relies on a combination of compatible clinical features, endoscopic appearances and histological findings. In this patient we didn't have any significant past history, colonoscopy was not possible, but histological features were in favour of UC. We were concerned about the limited option available to us, so opinion was taken from two histopathologist regarding this and both reported the same diagnosis.

Peritonitis and non responsiveness to medical management are the indications for surgery. The choice of operation includes proctocolectomy with a permanent Brooke ileostomy, proctocolectomy with an ileoanal pouch, or colectomy with an ileorectal anastomosis.

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