Abdominal pain and haematochezia in a 45-year-old woman with rheumatoid arthritis receiving adalimumab treatment

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DESCRIPTION

A 45-year-old woman presented to the emergency department (ED) with severe pain in the left lower abdomen, which was characterised as sharp, cramping, non-radiating and precipitated by food intake. She had experienced constipation for 3 days, which she treated with over-the-counter laxatives. She passed grossly bloody bowel movements while she was in the ED. Her medical history included seronegative rheumatoid arthritis (RA) diagnosed 1 year ago, hypertension, coeliac disease and internal haemorrhoids for which she underwent banding. She took weekly methotrexate and fortnightly adalimumab infusions for RA well as Losartan/Hydrochlorothiazide for hypertension. She was on a gluten-free diet for coeliac disease.

Physical examination revealed tachycardia, diffuse tenderness over lower abdomen and haematochezia. There were no signs of joint inflammation or any deformity. Laboratory evaluation was remarkable for mild leucocytosis with white cell count of 9.57 × 10^9/L, high sensitive C reactive protein of 32.5 mg/L and lactate level of 3.9 mmol/L. The coagulation profile was normal. The abdominal CT scan was unremarkable. She underwent oesophagogastroduodenoscopy, which showed evidence of acute gastritis and flattened mucosa in the duodenum indicative of her coeliac disease.

Colonoscopy showed diffuse severe inflammation characterised by edematous mucosa, scattered erosions, erythema and longitudinal ulcerations (colon single stripe sign) distributed from the rectosigmoid colon to the hepatic flexure (figure 1). Histopathology examination of the colon depicted crypt loss, lamina propria hyalinisation and congestion, confirming ischaemic colitis (figure 2).

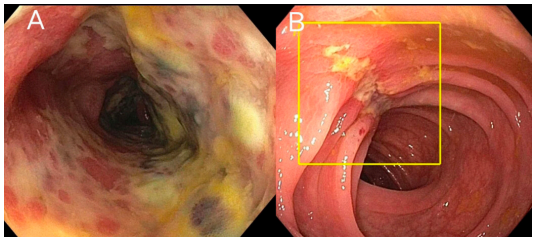

Figure 1 (A) Colonoscopy showed diffuse severe inflammation characterised by edematous mucosa, scattered erosions and erythema in the transverse colon. (B) Colonoscopy showed longitudinal ulcerations (colon single stripe sign) in the descending colon.

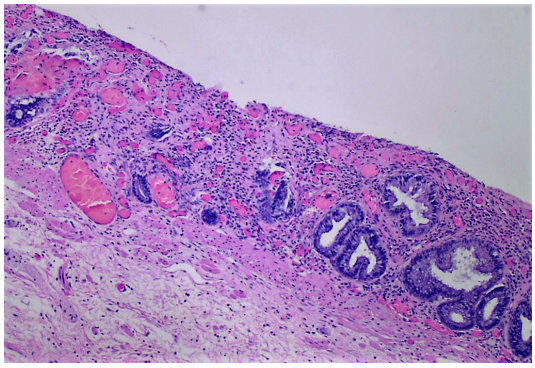

Figure 2 H&E staining of the descending colon biopsy depicted crypt loss, lamina propria hyalinisation and congestion, confirming ischaemic colitis.

Ischaemic colitis is a rare complication of rheumatoid vasculitis.[1 2] Tumor necrosis factor (TNF)-α inhibitors, commonly used biological agents in RA, are also reported to cause ischaemic colitis, through an unknown mechanism.[3] Such widespread localisation of the lesions, rather than watershed zones, goes against hypoperfusion as a cause of ischaemic colitis. Our patient was diagnosed with seronegative RA and was treated with adalimumab. Since she lacked other symptoms of RA flare and had only mildly elevated non-specific inflammatory markers, ischaemic colitis from rheumatoid vasculitis complication was unlikely. Adalimumab was suspected to cause ischaemic colitis in our patient. Methotrexate and adalimumab treatments were withheld and her haematochezia, leucocytosis and lactic acidosis resolved spontaneously after 3 days of symptomatic management. Abdominal pain improved with opioids and dicyclomine. Haemoglobin remained stable

Learning points

- Abdominal pain and haematochezia in patients with rheumatoid arthritis should raise concern for rheumatoid vasculitis of colonic blood vessels. However, if patients are on TNF-α inhibitor, an alternate diagnosis is anti-TNF-induced ischaemic colitis.
- Discontinuation of the offending agent and treatment with alternative medications can lead to resolution of anti-TNF-induced ischaemic colitis

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during the hospital course and she continued to remain free of symptoms of abdominal pain and haematochezia during further follow-up.

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