Bloody diarrhoea in a patient with HIV infection

Mohammad Reza Ashraghi,1 Morgan Williams,2 Thillainayagam Sriram3

DESCRIPTION
A man in his mid-40s with HIV infection—not taking highly active antiretroviral therapy (HAART) and not being monitored—with a 3-day history of profuse bloody diarrhoea and abdominal pain, presented to the emergency department. The patient believed this started after eating a take-away fish pie 2 days earlier. He was found to have an elevated C reactive protein of 281 mg/L.

An abdominal X-ray was obtained in the emergency department (figure 1). This showed thumb printing, which represents thickening of the colonic haustral folds, and is a sign of severe submucosal oedema. The lead pipe appearance of the descending colon is caused by the complete loss of the haustral markings. These findings suggested a significant colitis, though the underlying cause could not be ascertained from X-ray alone.1

Subsequent CT of the abdomen with contrast and flexible sigmoidoscopy supported the diagnosis of colitis, and considering the patient’s history, an infective cause was deemed most likely. After initial treatment with metronidazole, stool cultures grew Shigella flexneri, and the patient was successfully treated with a 14-day course of ciprofloxacin.

Shigella is a highly infectious Gram-negative bacteria, and is one of the most common causes of dysentery. Spread through the faeco-oral route, it presents with either watery diarrhoea and vomiting, or small volume bloody mucoid stools and abdominal pain. Very few organisms are required for inoculation, and onset is within 24–48 h, with symptoms lasting around 7 days.2 3 The risk of Shigella has been shown to be higher in men who have sex with men and those with HIV infection.3

Learning points
▸ Abdominal X-ray can be a valuable early diagnostic tool in patients with persistent or bloody diarrhoea.
▸ Infective diarrhoea should be considered in all patients with persistent or bloody diarrhoea, particularly if they are immunocompromised.
▸ Early stool culture is important in ensuring the correct treatment is started as soon as possible.

Figure 1 Abdominal X-ray taken on patient’s arrival at the emergency department. There is evidence of thumb printing (A) caused by severe mucosal oedema of the transverse colon, and lead piping (B) of the descending colon, which is caused by loss of the normal colonic hastra due to oedema. These changes are typical of colitis.