A patient with prolonged vague pain in the lower abdomen following a three-day period with diarrhoea and vomiting

T.M. Bisseling¹, J.W. op den Akker², M. Janssen¹, S.P. Strijk²

Departments of ¹Internal Medicine and ²Radiology, Radboud University Nijmegen Medical Centre, Nijmegen, the Netherlands, e-mail: T.Bisseling@aig.umcn.nl, ²corresponding author

WHAT IS YOUR DIAGNOSIS?

See page 285 for the answer to this photo quiz.

Figure 1 A transverse contrast-enhanced abdominal CT scan of the patient

Figure 2 Coronal reconstruction of the abdominal CT scan
DIAGNOSIS

The abdominal contrast-enhanced CT scan shows mild diverticulosis of the sigmoid (solid arrows, figure 1), with infiltration of the surrounding mesenteric fat (arrowheads, figure 1) extending along the inferior mesenteric vein (open arrow, figure 1). The wall of the inferior mesenteric vein is thickened and the lumen shows filling defects (arrowheads, figure 2) consistent with thrombosis. The splenic and portal veins are open, and there are no signs of appendicitis. These findings are very consistent with a thrombophlebitis of the inferior mesenteric vein complicating a mild sigmoid diverticulitis.

Thrombotic events of the mesenteric veins lack specific clinical symptoms and laboratory data. Mesenteric vein thrombosis is diagnosed in 5 to 15% of all mesenteric ischaemic events, usually in the superior mesenteric vein. In about 75% of the patients it occurs secondary to abdominal inflammation, cancer, coagulation disorders, recent abdominal surgery, or cirrhosis in portal hypertension. Thrombophlebitis of the inferior mesenteric vein secondary to diverticulitis occurs infrequently, and may be complicated by sepsis and intrahepatic abscesses. CT imaging helps to diagnose this complication at an early stage and can significantly improve the previously reported high mortality and morbidity rates associated with this condition. Conservative therapy with antibiotics, which target Gram-negative bacilli, anaerobes and enterococci, can lead to resolution of the thrombosis. Although the effect remains controversial, in most cases anticoagulant therapy is started. Elective surgery may be performed to eradicate the primary inflammatory process when antibiotic therapy fails.

Immediately after admission, this patient was started on anticoagulant therapy. Because the abdominal pain persisted and the CRP concentration rose to 246 mg/ml, intravenous antibiotic therapy was started within 48 hours, resulting in a clinical improvement. Blood cultures obtained on the first and second day of admission were negative. After one week the antibiotics amoxicillin/clavulanic acid were continued orally and the patient was discharged. At follow-up the patient had made a full recovery, laboratory parameters normalised, and the CT scan no longer showed abnormalities.

REFERENCES