Endoscopic diagnosis of asymptomatic perforation of colonic diverticulum

Luis María Merino-Peñacoba1, María Lourdes Ruiz-Rebollo2, Íñigo López-de-Cenarruzabeitia1, Elvira González-Obeso3 and Juan Beltrán-de-Heredia-y-Rentería1

1Department of General Surgery and Digestive Diseases. 2Department of Digestive Diseases. 3Department of Pathology. Hospital Clínico Universitario de Valladolid. Valladolid, Spain

BACKGROUND

Colonic perforation as complication of acute diverticulitis is a relatively frequent pathology and generally very symptomatic. Nevertheless, when it occurs in the mesenteric border, the course can be indolent.

CASE REPORT

An 82-year-old woman with a history of acute diverticulitis without any clinic or radiologic complications was treated medically with a satisfactory evolution. She remained asymptomatic 7 weeks after the acute process until control colonoscopy was performed.

Twenty-two centimetres from the anal margin, multiple colonic diverticula were found and one covered a perforation (Fig. 1). The test was cancelled and a CT was performed, showing an important retroneumoperitoneum secondary to a diverticular perforation (Fig. 2).

The patient underwent emergency surgery, during which a sigmoid colon perforation was found in the mesenteric border. A Hartmann type intervention was performed and postoperative period was uneventful.

The anatomopathological report confirmed the existence of a plastron secondary to a perforated diverticulum that opened to a cavity in the mesentery that contained fecaloid matter and focus of steatonecrosis fibrin deposits (Fig. 3), which confirmed the existence of a perforation prior to colonoscopy.

DISCUSSION

Colonoscopy is indicated 4-6 weeks after an episode of acute diverticulitis, in order to confirm the diagnosis and rule out malignant processes and other inflammatory diseases. Iatrogenic perforations have been described; however, we have not found any report that supports this case.

Fortunately for this patient, the perforation occurred in the mesenteric border and was covered by the mesosigma. This avoided peritonitis keeping the patient asymptomatic for weeks.

Fig. 1. Colonoscopy images that show the perforation in the sigmoid colon wall. (+++) marks the colon lumen and (*) the mesenteric fat.

Fig. 2. In this sagittal section of the CT scan the diverticular perforation is marked with an arrow and the free air in the retroperitoneum is marked with the arrowheads.
Fig. 3. Transverse section of the surgical specimen shows the perforated diverticulum (*) which connects to a pseudocavity in the meso (++) filled with intestinal content and with abundant steatonecrosis of the meso fat and fibrin deposits.

REFERENCES


