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Splenic rupture: an infrequent but potentially severe complication after colonoscopy

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**Key words:** Splenic rupture. Colonoscopy. Splenectomy.

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Dear Editor,
Splenic rupture is an infrequent compilation and can be severe without an early diagnosis. We present the case of a 53-year-old female who had undergone colonoscopy 24 hours previously and presented to the ER due to pain in left hemithorax and hypotension. She was diagnosed with a splenic rupture via abdominal computed tomography (CT). An urgent splenectomy was performed with a favorable postoperative evolution. The clinical recognition of splenic rupture is vital due to the fact that we are not as familiarized with this condition as we are with hemorrhage and perforation after colonoscopy.

**CASE REPORT**
Splenic rupture secondary to colonoscopy is an infrequent compilation and is potentially fatal. The implementation of screening for colorectal cancer entails an increase in the number of colonoscopies performed. Therefore, this compilation must be considered in order to make an early diagnosis. We present the case of a 53-year-old female who underwent a colonoscopy in an external center due to hematochezia, her medical records did not indicate any problems with her evolution. After 24 hours,
she presented with left lateral thoracic pain and exhaustion. Upon examination, she was hypotensive and tachycardic with a bland abdomen. The blood test identified anemia (Hb 8.8 g/dL) and an abdominal CT was performed, which identified a splenic rupture with a perisplenic hematoma (Fig. 1). Thus, an urgent splenectomy was performed.

**DISCUSSION**

A splenic rupture is an unusual potentially severe complication in the absence of an early diagnosis. The most frequent complications after colonoscopy are hemorrhage and perforation. Three lesion mechanisms have been proposed for this condition including direct trauma, excessive traction on the splenic-colic ligament and the presence of adhesions that limit the mobility between colon and spleen (1,2). The most frequent clinical symptom is abdominal pain in the left hypochondrium, which radiates into the left shoulder (Kehr’s sign). It may also be accompanied by hypotension and anemia. Our patient presented hemodynamic instability and reduced hemoglobin levels, as with the case previously presented in this journal by Laiz-Díez B et al. (3). Nevertheless, our patient did not present with abdominal pain, even though she had Kehr’s sign. The gold standard for a diagnosis is CT with intravenous contrast. However, an echography is also an alternative. A conservative management is limited to those cases with hemodynamic stability, minor subcapsular bleeding and no hemoperitoneum. Otherwise, an urgent splenectomy is required (4,5). Embolization of the splenic artery can be used to manage the active bleeding (2).

**REFERENCES**


Fig. 1. Splenic rupture with perisplenic and perihepatic hemoperitoneum and acute bleeding with contrast extravasation.