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# Hemoperitoneum due to splenic injury after colonoscopy, a complication perhaps not so uncommon

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*Dear Editor,*

We have read with interest in your journal the article "Splenic rupture as an endoscopic complication: as rare as it appears?" (1) and we would like to contribute a case handled in our hospital.

## CLINICAL CASE

We present the case of a 72-year-old male smoker. His medical history showed a right lobectomy and adjuvant chemotherapy for lung adenocarcinoma. He was not under any kind of antiplatelet or anticoagulant medication. He had no history of abdominal surgery. An elective colonoscopy was performed with conscious sedation (midazolam and pethidine). The bowel preparation was appropriate. Diverticula and several pedunculated polyps were observed. After injection of diluted adrenaline (1/50000), a tubular adenoma with low-grade dysplasia measuring 20 millimeters in size was successfully removed using a diathermic loop at the splenic flexure. Post-resection mucosal defect was closed prophylactically with clip.

24 hours later, the patient was admitted to the emergency department due to abdominal pain and hypotension. There were no signs of peritoneal irritation. Laboratory analysis showed creatinine of 2.6 mg/dl, and C-reactive protein of 20 mg/L. Hemoglobin dropped from an initial level of 12.0 g/dL to 6.2 g/dL. A computerized tomography was performed (Fig. 1) after hemodynamic stabilization. The patient was

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treated with urgent splenectomy. He needed blood transfusion (six units of packed red blood cells). Postoperative course was uneventful and the patient was discharged home on day 5 after admission. Histopathological examination of his spleen revealed partial decapsulation. There was no evidence of underlying splenic disease.

## DISCUSSION

Our case presented tobacco consumption, oncological history and polypectomy (1,2) as risk factors for splenic injury after colonoscopy. Due to pedunculated polyp morphology wall damage was minimal. Management was optimal due to a high degree of clinical suspicion (3). Computed tomography should be performed immediately after resuscitation of the patient even if the abdominal X-ray is negative (2). The treatment of choice is urgent surgery (3,4,5) when there is hemodynamic instability. This complication has been described as very rare, with an incidence of 0.004 % (4). Interestingly the cases presented here and before (1,4) suggest that the incidence of this complication could be higher.

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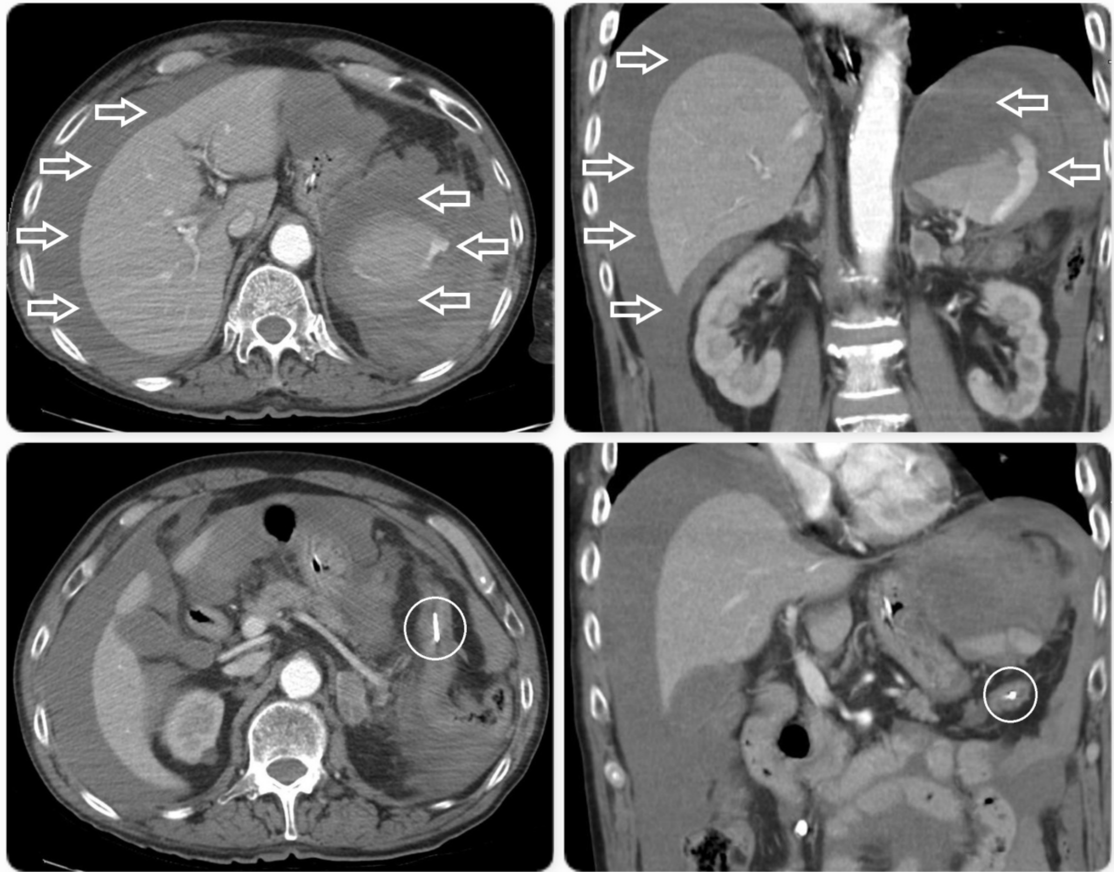

**Figure 1. Urgent abdominal computed tomography. Left images: axial view; right: coronal view. Upper images: hemoperitoneum and splenic hematoma with active bleeding (white arrows). Lower: clip placed at splenic flexure of colon (white circles).**

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