

Early presentation of splenic injury after colonoscopy

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A 73-year-old woman presented with a history of lower abdominal pain that had recently become worse. Her medical history included a partial gastrectomy for bleeding ulcer, hysterectomy and bladder repair. The rest of her history was unremarkable in terms of other gastrointestinal symptoms, and a recent gastroscopy showed nothing abnormal. After discussing the situation with the patient, we proceeded to a colonoscopy.

The colonoscopic examination, which was done in the usual fashion after intravenous administration of sedation (meperidine and diazepam), proceeded as far as the cecum. Her colon appeared normal. The patient tolerated the procedure well and was discharged home after 2 hours.

An hour after her arrival at home she began to feel left-lower- and left-upper-quadrant pain. Her abdominal pain progressed during the day. In the evening, the pain started radiating to her left shoulder and she began to feel bloated. She was brought to the hospital late that same night by a family member.

Her signs and symptoms were consistent with acute peritonitis. An abdominal series showed no evidence of perforation. Her bloodwork did not indicate leukocytosis but revealed a decrease in her hemoglobin from 140 to 120 g/dL. Her blood pressure and heart rate were within the normal range. I decided to transfer

her to a tertiary care centre for computed tomography.

The next morning, her hemoglobin measurement was 60 g/dL and the CT scan showed signs of splenic laceration. Free fluid was apparent around the spleen and within her pelvis. Bed rest and blood transfusions improved her condition, which 1 week later was judged stable enough for discharge.

Discussion

Splenic rupture after colonoscopy is a rare complication:¹ a search of the literature yielded only 14 case reports. The acute form of this type of rupture occurs within a few hours after the procedure, whereas diagnoses of delayed splenic ruptures have been reported 2–10 days after colonoscopy.^{2,3}

It is believed that conditions causing increased splenic adhesions may predispose one to capsular avulsion.^{4,5} These conditions include adhesions from previous surgery. The mechanism may involve excessive pulling of the splenicocolic ligament from the simple act of manoeuvring the colonoscope around the splenic flexure, which may cause the laceration.

Treatments described in the literature have included bed rest and blood transfusions, splenectomy, and splenic artery embolization.^{1,4}

Conclusion

Although a rare complication, splenic rupture after colonoscopy can be fatal. It should be suspected in patients with acute abdominal pain after colonoscopy who also have decreased hemoglobin concentrations, after perforation has been ruled out. An urgent CT scan is the best way to diagnose this complication.

Competing interests: None declared.

References

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