

Serosal lacerations during colonoscopy – a rare complication

A 47-year-old man underwent colonoscopy due to chronic diarrhea. A polypectomy of three polyps of less than 7 mm in the sigmoid was performed without complications. Shortly after the procedure, the patient complained of pain in the right iliac fossa, which was increasing in intensity. Examination of the patient revealed peritoneal irritation, leukocytosis, and elevation of C-reactive protein. Due to a suspicion of perforation, an abdominal computed tomography (CT) scan was performed, which showed pneumoperitoneum. At laparoscopy, multiple serosal lacerations were observed in the cecum and ascending colon (► Fig. 1), and hematomas in the transverse colon, with apparent intact colonic mucosa. Washing of the peritoneal cavity was performed, and drains were placed. The patient's postoperative course was uneventful, and he was discharged 6 days after admission. Serosal tears without apparent rupture of the colon are complications that have been reported following colonoscopy only in a few cases [1–3]. Serosal lacerations represent the earliest stage in rupture of the colon and occur before any mucosal abnormality can be observed [4]. They have been attributed to the pressure of the air introduced through the colono-

scope, and to stretching of the colon wall [5]. In contrast to published cases, in this case, resection of the colon was not performed, and the patient recovered favorably. Therefore, we conclude that serosal laceration is usually a minor complication whose real incidence is unknown because probably it happens without being noticed, with few symptoms, and with spontaneous resolution. We believe that this complication should be included in the differential diagnosis of patients who develop persistent pain after a colonoscopy, so that a conservative treatment may be attempted, avoiding surgery.

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References

- 1 Livstone EM, Kerstein MD. Serosal tears following colonoscopy. *Arch Surg* 1976; 111: 88
- 2 Wu TK. Occult injuries during colonoscopy. Measurement of forces required to injure the colon and report of cases. *Gastrointest Endosc* 1978; 24: 236–238
- 3 Ehrlich CP, Hall FM, Joffe N. Postendoscopic perforation of normal colon in an area remote from instrumentation – with secondary tension pneumoperitoneum. *Gastrointest Endosc* 1984; 30: 190–191
- 4 Livstone EM, Cohen GM, Troncale FJ et al. Diastatic serosal lacerations: an unrecognized complication of colonoscopy. *Gastroenterology* 1974; 67: 1245–1247
- 5 Uno Y, Morita T. Colonic perforation and serosal tears associated with colonoscopy. *Lancet* 1997; 349: 1888

Bibliography

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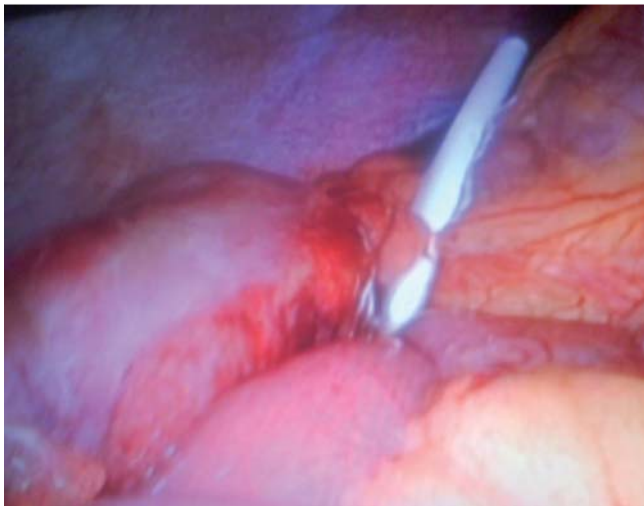


Fig. 1 Laparoscopic image showing serosal lacerations in the cecum and ascending colon.