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 7mm 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 post-operative 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 colonoscope, 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.

Competing interests: None

N. Alcaide¹, P. Diez-Redondo¹, M. T. Herranz-Bachiller¹, P. Gil Simón¹, R. Velasco-Lopez², M. Perez-Miranda¹

¹ Gastrointestinal Endoscopy Unit, Department of Gastroenterology, University Hospital Río Hortega, Valladolid, Spain
² Department of Gastroenterology Surgery, University Hospital Río Hortega, Valladolid, Spain

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DOI http://dx.doi.org/10.1055/s-0032-1309710
Endoscopy 2012; 44: E268 © Georg Thieme Verlag KG Stuttgart · New York ISSN 0013-726X

Corresponding author
N. Alcaide, MD
Department of Gastroenterology
University Hospital Río Hortega
C/Dulzaina 2
47012 Valladolid
Spain
Fax: +34-983-420400
noelialcaide@hotmail.com

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