Conservative management of a late rectal perforation following cold biopsy polypectomy

Bowel perforation is a rare complication of endoscopic polypectomy [1]. It may result from excessive stretching of the bowel wall during the movements of the endoscope, barotrauma, or as a direct result of endoscopic therapy or tissue sampling [1]. We report the case of a 55-year-old man with a familial history of colon cancer and previous endoscopic removal of adenomas in the descending colon who underwent a follow-up colonoscopy. The examination, which was easily carried out up to the cecum, revealed a 4-mm sessile polyp in the rectum (8 cm from the anal verge), removed with cold biopsy. The patient presented to the emergency room 2 days later with fever (39 °C), and severe abdominal pain and distension. Hematological investigations showed a white cell count of 16700/μL with granulocytosis (95.3 %) and a C-reactive protein level of 28.68 mg/dL. Physical examination revealed tenderness in the lower abdomen. No free air was seen on both abdominal and chest radiographs. The patient then underwent urgent computed tomography (CT) of the abdomen, which showed rectal perforation with a collection in the perirectal space (Fig. 1a) without pneumoperitoneum (Fig. 1b). The patient improved with conservative management that included bowel rest and intravenous antibiotics and was discharged 1 week later. After 1 month a repeat abdominal CT scan showed normal findings (Fig. 2a, b).

Cold biopsy forceps removal is the simplest method for polypectomy of small colorectal polyps [2]. The advantages of cold biopsy polypectomy include avoidance of the risks associated with electrosurgery and an almost negligible risk of colonic perforation [3]. To the best of our knowledge, this is the first case report of a late rectal perforation following cold polypectomy with biopsy forceps, which was managed conservatively. This management option was chosen and was successful because the perforation was very small and occurred below the pelvic peritoneal reflection, so that the extravasation remained extraperitoneal.

Fig. 1 Computed tomography (CT) in a 55-year-old man presenting with fever and severe abdominal pain and distension following cold biopsy polypectomy 2 days earlier. a View showing the rectal perforation. b There was no pneumoperitoneum.

Fig. 2 a, b Computed tomography images at follow-up 1 month showing complete resolution of the perforation.

Endoscopy_UCTN_Code_CPL_1AJ_2AC

Competing interests: None

C. Luigiano1, F. Ferrara2, S. Miraglia1, C. Favara1, C. Fabbri2, G. La Ferrera1, C. Virgilio1

1 Unit of Gastroenterology and Digestive Endoscopy, ARNAS Garibaldi, Catania, Italy
2 Unit of Gastroenterology and Digestive Endoscopy, AUSL Bologna Bellaria-Maggiore Hospital, Bologna, Italy

References
1 Panteris V, Haringsma J, Kuipers EJ. Colonoscopy perforation rate, mechanisms and outcome: from diagnostic to therapeutic colonoscopy. Endoscopy 2009; 41: 941–951
3 Rex DK. Preventing colorectal cancer and cancer mortality with colonoscopy: what we know and what we don’t know. Endoscopy 2010; 42: 320–323

Bibliography
DOI http://dx.doi.org/10.1055/s-0032-1325859
Endoscopy 2012; 44: E430
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
C. Luigiano
Unit of Gastroenterology and Digestive Endoscopy
ARNAS Garibaldi Nesima Hospital
Via Palermo 636
95122 Catania
Italy
Fax: +39-095-7595828
carmeluigiano@libero.it

Luigiano C et al. Conservative management of a late rectal perforation… Endoscopy 2012; 44: E430