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CLINICAL CASE

Retropneumoperitoneum due to endoscopic dilation. Is conservative management possible?☆

Estíbaliz Echazarreta-Gallego*, Elena Córdoba-Díaz de Laspra, Manuela Elía-Guedea

Sección de Coloproctología, Servicio de Cirugía General, Hospital Clínico Universitario de Zaragoza, Zaragoza, Spain

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KEYWORDS
Intestinal perforation;
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Abstract
Background: The incidence of anastomotic stricture varies due to the different definitions given to the condition. In most cases they are asymptomatic, and if there are symptoms, they are usually those of a partial intestinal obstruction.
Case report: The case is presented of an 80 year old patient who underwent a lower anterior resection for rectal neoplasm. After ileostomy closure, he presented with subocclusive symptoms caused by stenosis of colorectal anastomosis. This stenosis was managed with endoscopic dilations, and one of these dilations produced an anastomotic perforation with pneumoperitoneum, retropneumoperitoneum, and pneumothorax. Once the patient was clinically and haemodynamically stable, the perforation was treated with conservative measures, resolving the complication satisfactorily.
Conclusions: The literature describes several management options for colorectal anastomoses strictures, such as surgical resection, rubber dilators, endoscopic dilation, all of which might produce colonic perforation. Its management ranges from conservative measures to surgical intervention.

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* Corresponding author at: Avenida San Juan Bosco, 15, 50009 Zaragoza, Spain. Tel.: +34 976 76 57 00.
E-mail address: esti.egallego@hotmail.com (E. Echazarreta-Gallego).

PALABRAS CLAVE
Perforación intestinal;
Estenosis anastomosis;
Colonoscopia

Retroneumoperitoneo secundario a dilatación endoscópica de anastomosis colorrectal: ¿permite un manejo conservador?

Resumen
Antecedentes: La incidencia de estenosis anastomótica tras cirugía colorrectal es variable por las diferentes definiciones que existen de ella. En la mayoría de las ocasiones son asintomáticas y en el caso de que presenten sintomatología se manifiestan como cuadro suboclusivo.
Caso clínico: Presentamos el caso de un paciente de 80 años intervenido de neoplasia de recto que, tras cierre de ileostomía, presentó cuadro suboclusivo ocasionado por estenosis de anastomosis colorrectal. Esta estenosis se trató con dilatación endoscópica, ocasionando una perforación anastomótica con neumoperitoneo, retroneumoperitoneo y neumotórax. Tras la estabilización del paciente, la perforación se manejó con medidas conservadoras que lograron resolver el cuadro de manera satisfactoria.
Conclusiones: Se han descrito diversas opciones terapéuticas para el tratamiento de las estenosis anastomóticas, entre las que destacan: resección quirúrgica, empleo de dilatadores, colonoscopia dilatadora. Todas las opciones terapéuticas pueden conllevar una perforación colónica. La resolución en función de la estabilidad del paciente permitirá desde un manejo conservador, como el caso que presentamos, hasta una intervención quirúrgica.

Background

The incidence of iatrogenic perforation during colonoscopy varies from 0.016%,[1] described in diagnostic colonoscopy, to 5% in therapeutic colonoscopy. Management of this type of perforation varies and includes different strategies depending on the patient's clinical condition and the support means available in the environment, with the possibility of various strategies ranging from conservative treatment to a surgical approach.

We present a clinical case with iatrogenic perforations; conservative treatment in hospital was possible for this patient, despite the dramatic clinical/radiological picture, with intensive monitoring over the first hours.

Clinical case

We present the case of an 80-year-old woman with a history of systemic high blood pressure, operated in 2003 for an infrarenal abdominal aortic aneurysm. After assessment in the Digestive Department for occasional rectorrhagias, she was diagnosed endoscopically with high grade rectal adenomacarcinoma 6–7 cm from the anal verge. The study was completed with axial computed tomography that revealed a rectal neoplasm with involvement of the peri-rectal lymph nodes and infrarenal abdominal aortic aneurysm with intraluminal thrombus. After their assessment, the Oncology Department considered that neoadjuvant treatment would not be worthwhile, and therefore the patient underwent a low anterior rectal resection with laparascopic total mesorectal excision and reconstruction of the tract with mechanical side- to- end anastomosis (circular stapler, 28 mm) and loop ileostomy at the level of the right iliac fossa. The anatomical pathological result was high grade rectal adenocarcinoma pT3N2a (GL 5+/14) Dukes' stage C. A subclinical leak was observed in the postoperative period which was treated and resolved conservatively. Three months later, closure of ileostomy was scheduled after checking the integrity and normality of the anastomosis by rectal examination and anoscopy. On the second post-operative day, after reconstruction of the digestive tract, the patient presented abdominal distension, nausea and vomiting. Abdominal X-ray revealed hydroaeric levels in the small and large intestine. A rectoscopy was performed because of the suspicion of anastomotic stenosis, the suspicion was confirmed and pneumatic dilation was performed by colonoscopy. This dilation was laborious, it was difficult to identify the anastomosis (probably because it was side-to-end) and the blind pouch of the side closure. The patient was sedated during the procedure and only at that time was major abdominal distension noted which was attributed to colonic distension due to the huge amount of air insufflated during the long procedure. At no point did the endoscopist perceive any perforation. Two hours after the procedure, the nursing staff reported that the patient was presenting clinical signs of high blood pressure, tachycardia and sweating. Physical examination revealed abdominal distension with palpable crepitus at the level of the chest and lower hemiabdomen, accompanied by haemodynamic instability and the patient was mildly obtunded. She was therefore transferred to the Intensive Care Unit, where she was stabilised using the necessary measures without administering vasoactive drugs. The diagnostic study included axial slice thoracoabdominopelvic computed tomography which revealed a large pneumo- and retropneumoperitoneum with pneumodediastinum (Figs. 1–4). And a single study with plain chest X-rays revealed a discreet bilateral pneumothorax (Fig. 5).

Due to the patient's age and because it had been possible to stabilise her with conservative treatment, it was decided