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Percutaneous Endoscopic Colostomy

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ABSTRACT
Many cases of benign mechanical obstruction, pseudo-obstruction, and other disorders occur in elderly patients and / or patients with comorbidities that pose a high risk for surgical treatment. The colorectal surgeon has an endoscopic procedure developed in order to achieve resolution in these circumstances. We present the indications, technique, contraindications and complications of percutaneous endoscopic colostomy so that it is taken into account in the therapeutic algorithm of these conditions.

Keywords: *Colonoscopy; Colonic Obstruction; Percutaneous Endoscopic Colostomy*

INTRODUCTION

Percutaneous endoscopic colostomy is an endoscopic procedure in which a plasticized tube is placed into the colon (sigmoid, cecum, or transverse, most often) to achieve decompression or irrigation of the large intestine (one). It can be performed in patients who cannot be approached surgically, in certain conditions where hygienic-dietary or minimally invasive measures are not enough and their quality of life is significantly altered. The indications are: recurrent volvulus of the sigmoid colon (Fig. 1), pseudo-obstruction, functional constipation, fecal incontinence and chronic constipation due to neurological disorders. The basis is to fix the colon to the anterior abdominal wall by placing one or more tubes, with direct traction and subsequent fibrosis to prevent rotation and displacement of the intestine, achieving decompression and allowing intestinal lavage through it (Fig. 2). We present the percutaneous endoscopic sigmoidostomy technique as a treatment option for recurrent volvulus.

MATERIAL AND METHOD

We proceed with the Ponsky technique.[1-3] With the patient in the supine position, under general anesthesia with intubation or sedation, a percutaneous endoscopic gastrostomy set is used (Fig. 2).

It can be performed with or without mechanical bowel preparation and always with antibiotic therapy that continues in the postoperative period.

As a first step, a colonoscopy is performed to determine the placement of one or more tubes by transillumination. Generally, the middle part of the sigmoid is chosen, although it is subject to the pathology to be resolved and the characteristics of the patient (Fig. 3).

Technique

The procedure consists of:

1. Under sedation, infiltration of the abdominal wall with local anesthesia at the chosen site.
2. Placement of the needle trocar in the colon under direct endoscopic vision.
3. Passage of the guide wire through the trocar.
4. Take the guide wire with the loop and pull it out through the anus.
5. Assemble the colostomy tube with the guide.
6. Position the tube by pulling on the abdomen and sliding it through the anus ("pull" technique) (Fig. 4).
7. Fix the tube to the abdominal wall, with a suitable device and / or sutures to the skin (Fig. 5).
8. Perform a new colonoscopy to check the position of the tube in place (Fig. 6, 7 and 8).

Contraindications include: failure of transillumination, sepsis, infection of the abdominal wall, signs of colonic ischemia or perforation, and mechanical intestinal obstruction.

Complications

The early complications recorded are infection of the placement site, bleeding, pain, leakage of the colostomy and peritonitis, granulomas, retraction, erosion, migration and accidental or voluntary removal of the tube. In general, a high rate of complications, especially infectious, is reported, ranging from 21% to 77% with mortality from 5% to 9.7%.[1,2,4] Late morbidity due to peritonitis caused by filtration is mentioned.

CONCLUSION

There is no definition on the diameter of the tube to be used, which varies in the different publications between

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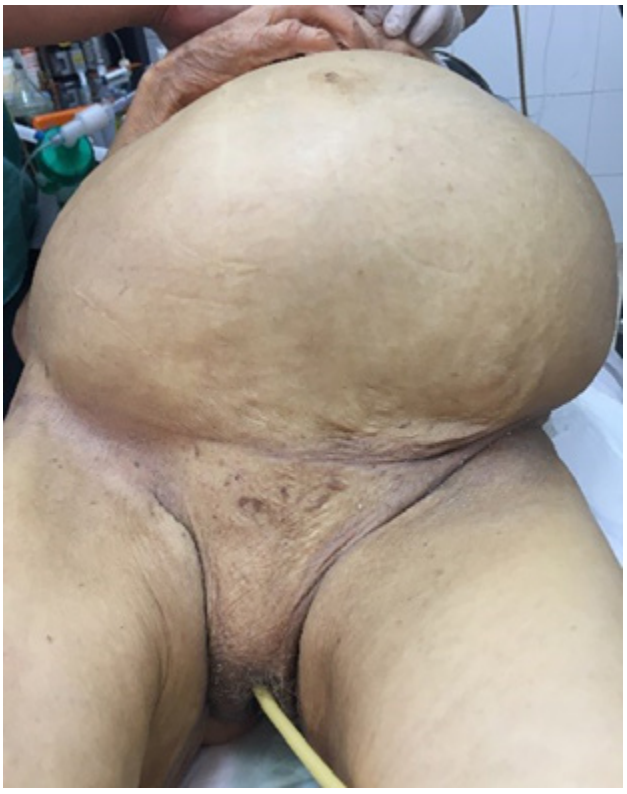

Figure 1: Recurrent volvulus of the sigmoid colon in a 95-year-old woman.

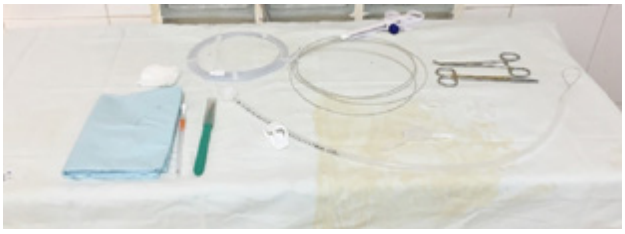

Figure 2: Percutaneous endoscopic gastrostomy set (24 F).

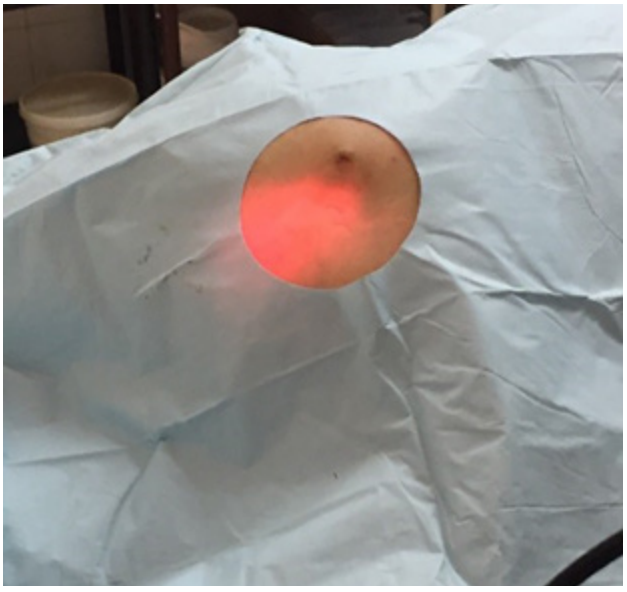

Figure 3: Localization by colonoscopy and transillumination.

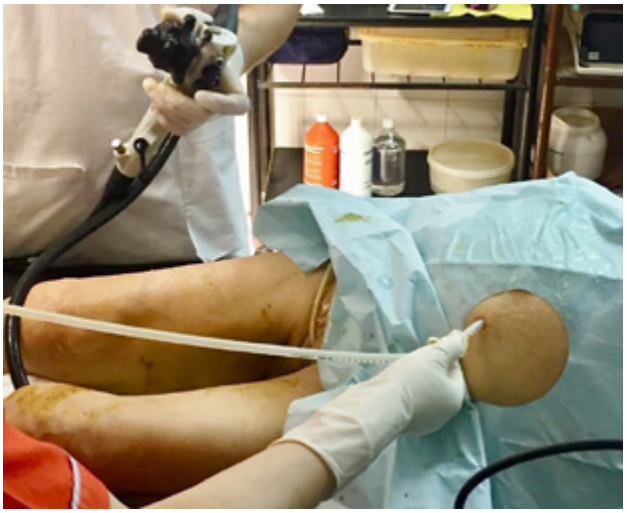

Figure 4: Placing the tube by pullthrough technique.

Figure 5: Tube placed.

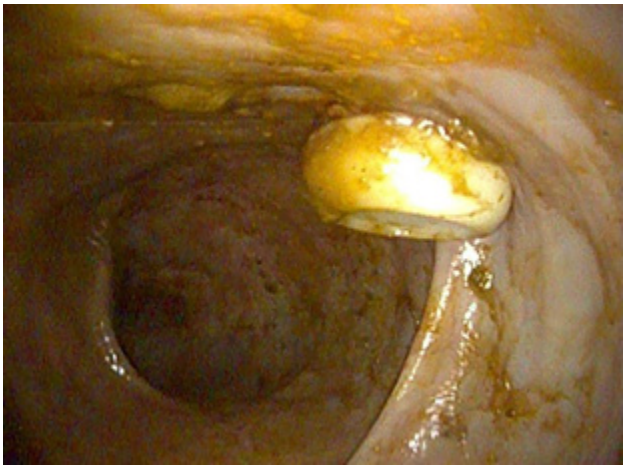

Figure 6: Endoscopic control.

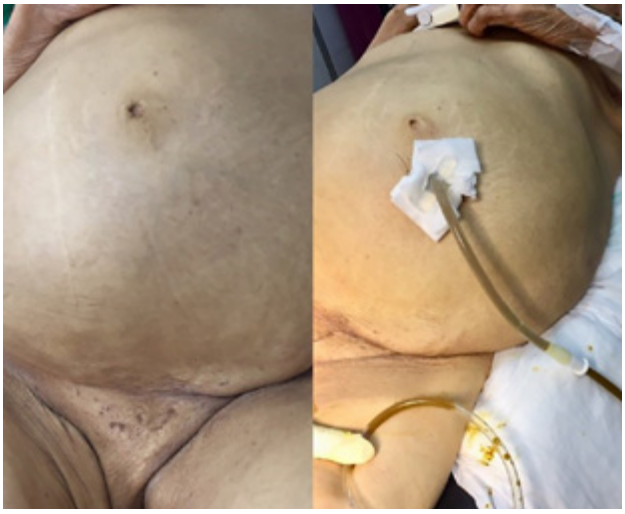

Figure 7: Patient before and after tube placement.

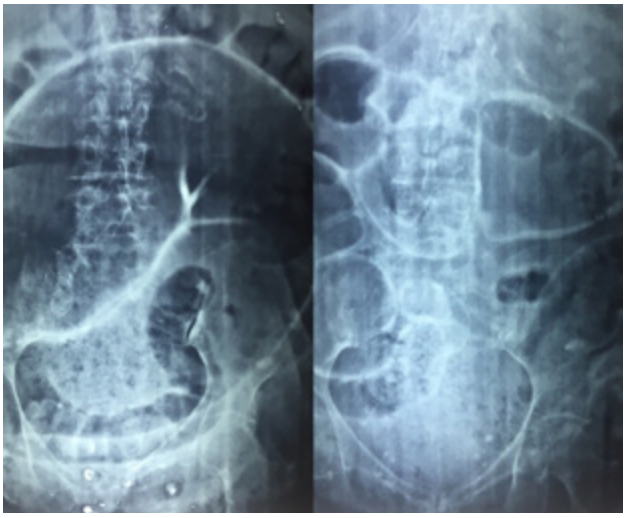

Figure 8: Radiological control prior to and 48 h after percutaneous endoscopic colostomy.

12 and 24 French.

Likewise, controversies arise over the number of tubes to be placed and the length of time the tube remains, which varies according to reports between 1 and 26 months. It seems best to use two tubes, for a minimum period of 7-8 months, especially for the treatment of recurrent volvulus of the sigmoid colon.

Percutaneous endoscopic colostomy is a valid alternative for the treatment of patients unfit for surgery. It is a therapeutic endoscopy procedure that requires experience and is already recommended in international guidelines.[4-7]

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