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Local correction of a transverse loop colostomy prolapse by means of a stapler device

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Abstract Prolapse is a common complication in patients with a transverse loop colostomy. In most cases, the prolapse can be managed conservatively awaiting time for closure eventually. However, loop stoma may also be intentionally permanent or the patient may be too fragile to have the colostomy closed and in these cases a laparotomy is required for correction of the prolapse. A simple method allowing local correction of the prolapsed loop stoma is described.

Key words Stomal complications • Stomal prolapse • Incarceration • Strangulation • Stapler device

Introduction

A transverse loop colostomy is often used as a temporary measure proximal to an obstruction of the colon and rectum or to protect a low colorectal anastomosis. It may also be used intentionally as a palliative measure in patients with an unresectable stricturing cancer. Prolapse is a common complication with a transverse colostomy [1–5]. In most cases, the prolapses can be managed conservatively, awaiting time for closure eventually, but laparotomy may be required in other cases with resection and separation of the limbs or formation of an end stoma with closure of the distal limb [1]. A new simple method can be used to avoid laparotomy and allow a local repair with reconstruction of the loop colostomy.

Operative technique

The operation was performed under general anesthesia. A small vertical incision 2–3 cm in length was made 1–2 cm above the skin of the lateral side of the prolapsed stoma (Fig. 1a). Both the outer and inner walls of the prolapse were incised allowing access into the intestinal lumen. A stapler device (GIA 60; Tyco Healthcare, Tokyo, Japan) were introduced and the prolapse was excised by repeated stapling maneuvers (Fig. 1b). A few full-thickness sutures were added for closure of the primary incisional site (Fig. 1c). Complete hemostasis of the intestine was indispensable with 3–0 absorbable sutures following excision of the prolapsed intestine.

Two patients with diverting loop transverse colostomy for inextirpable colorectal cancer, presented with a prolapsed transverse colostomies 20 cm and 25 in length, underwent this procedure. Operative times were 45 min and 59 min and blood losses were 160 ml and 130 ml,

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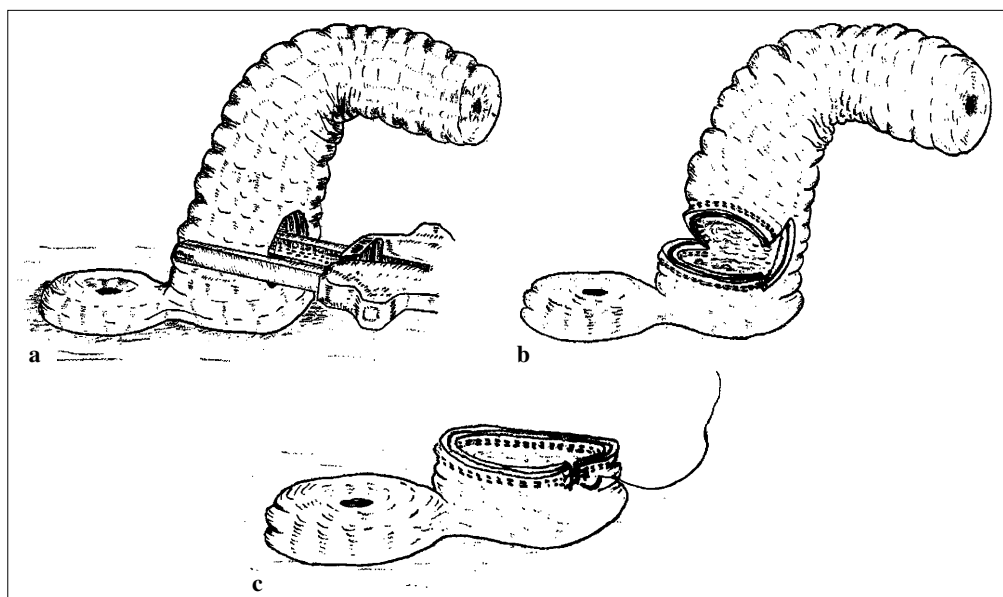


Fig. 1 Local correction of prolapse with a stapler device. **a** An incision 2–3 cm in length and 1–2 cm above the skin was made through both the wall layers into the intestinal lumen. The arms of the stapler were introduced for full-thickness stapling. **b** The stapler was used twice or three times to accomplish circular excision with anastomosis of the prolapsed stoma. The most important staples are those over the mesenteric vessels. **c** After the resection had been completed, the original incision was closed separately with sutures

respectively. The postoperative course was uneventful with no further colostomy problems until death.

Discussion

Stomal prolapse has been reported to occur in 2%–22% of cases with loop stoma [2, 5] and commonly involves the distal limb [1, 6]. The prolapse can be managed conservatively but sometimes a laparotomy may be required. A simple, new method allowing excision and local repair of the prolapse was successfully used in two cases, thereby sparing the patients from a formal laparotomy. Stapling and hemostasis of the mesenteric vessels was accomplished safely under direct vision within an hour. A similar procedure can be performed with a hand-sewn technique, but this may cause a larger blood loss and longer surgical time in operating the edematous and congested colon. Although use of a stapler is more costly, it may secure a complete hemostasis of the mesenteric vessels and standardized

anastomosis of the colon under abnormal conditions of the colon. The techniques may be an option for management of a prolapsed transverse colostomy.

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