Simple Device for Treating Prolapsing Loop Colostomy

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Stoma prolapse is a common complication of intestinal stoma. Although various surgical methods yield satisfactory results, nonsurgical treatment may be better for a temporary stoma. We report a case of a patient with a distal limb prolapse of a right transverse colostomy who received nonsurgical treatment with satisfactory results. For the treatment of a temporary transverse loop colostomy with distal limb prolapse, we designed a simple device consisting of a pediatric plastic medicine cup, which was rolled into a towel to shape the bottom of the cup into a compressor. The towel was put on the stoma outside of the colostomy bag with the compressor above the prolapsing limb of the colostomy. An abdominal binder was applied to fix the towel. [*J Chin Med Assoc* 2006; 69(3):138–139]

Key Words: device, loop colostomy, prolapse

Introduction

Stoma prolapse is a common complication of intestinal stoma.[1] Various surgical methods[2–6] yield satisfactory results. However, nonsurgical treatment may be better for a temporary colostomy, especially when it will close within a short period of time. A previous article introduced a simple, but excellent, device used to solve the problem of prolapsing loop colostomy.[7] As the device was not commercialized or easy to obtain, we report here another simple device to achieve successful nonsurgical management of a patient who had a temporary right transverse colon loop colostomy with distal limb prolapse.

Case Report

A 4-year-old girl had a history of intermittent constipation and abdominal fullness since she was born. She was sent to our emergency room for acute onset of severe abdominal pain and distension on February 9, 2004. A large amount of bowel gas was noted on a plain abdominal film. She was discharged because the symptoms subsided spontaneously without specific treatments, but was taken to our pediatric outpatient clinic again because of symptom recurrence. She was admitted to the pediatric ward under the impression of suspected intestinal obstruction on February 12.

She received a barium enema examination, which showed limited distension of the rectosigmoid junction. Anorectal manometry displayed normal relaxation reflex of the internal sphincter. Colonoscopy found a ring-like stenosis about 3 cm in length at 18 cm from the anal verge. Segmental stricture of the sigmoid colon was suspected. Exploratory laparotomy was done on February 25, which showed a redundant (30 cm in length) and markedly dilated sigmoid colon without stricture. Resection of the redundant sigmoid colon with a primary anastomosis was performed under the impression of sigmoid colon volvulus.

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Unfortunately, leakage of the anastomosis occurred on postoperative day 4, and was managed immediately with a right transverse loop colostomy and repair of the anastomosis.

One week after the operation for colostomy, the distal limb of the colostomy prolapsed. In spite of manual reduction, the episodes of prolapsing occurred about twice a day, always accompanied by nausea and vomiting. We performed the operation of colopexy, as mentioned by Gauderer and Izant,[4] on March 15, but prolapse of the distal limb recurred on March 19, again with vomiting and nausea. Two days later, we created a simple device (Figure 1) to avoid prolapse. The device consisted of a pediatric plastic medicine cup, 4 × 4 cm in size, which was rolled into a towel to shape the bottom of the cup into a compressor.

The towel was put on the stoma (outside of the colostomy bag) and the compressor was placed above the distal limb of the colostomy. An abdominal binder was applied to fix the towel. Prolapse of the colostomy did not recur. The patient received closure of the colostomy on April 5, 2004, with an uneventful course.

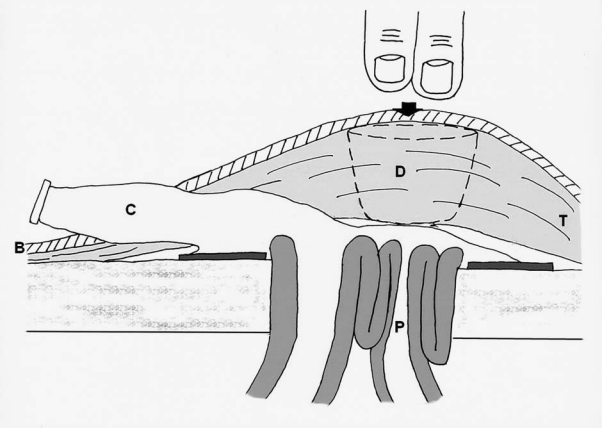

Figure 1. The device (D) is rolled in a towel (T), put above the prolapsing limb of the colostomy (P), which is covered by a colostomy bag (C), and fixed by an abdominal binder (B). The position of the device can be adjusted with the fingers.

Discussion

Intestinal stoma is a common procedure for the management of many gastrointestinal conditions, but various early and late complications such as infection, skin excoriation, stoma stenosis, and prolapse often occur.[1] Stoma prolapse is a common complication secondary to skin erosion. Various surgical managements such as revision of the stoma, re-siting the stoma, internal fixation of the prolapsing bowel, or button-pexy fixation[2–6] may yield satisfactory results. Many instances of intestinal stoma are temporary, especially for the pediatric population, and may be closed within several weeks. A nonsurgical management that is effective and easily applied to avoid prolapse recurrence is obviously superior to surgical treatment. In this report, our simple device was easy to apply and effective in avoiding prolapse recurrence. The key point is to use the fingers to push the bottom of the plastic cup through the towel to compress the prolapsed stoma correctly. Although another simple device has been reported to successfully solve the problems of prolapsing loop colostomy,[7] it was not commercialized or easy to obtain. Our device is easy to make and economical and produces a satisfactory result for a transient stoma.

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