Laparoscopic Ileus Operation due to Paracolostomy Hernia

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Summary: We present a case report of a 62-year-old man with adhesive ileus caused by paracolostomy hernia. The patient underwent enterosynechotomy for ileus and colopexy for paracolostomy hernia laparoscopically. This procedure has benefits of prevention of recurrent adhesive ileus and early postoperative recovery of the intestinal tract.

Key words laparoscopic surgery, paracolostomy hernia, ileus

INTRODUCTION

Adhesive ileus often recurs postoperatively and prevention of its recurrence is important. Because of little postoperative invasion and prevention of recurrent adhesive ileus, laparoscopic operation is increasingly conducted to treat adhesive ileus [1-3]. Paracolostomy hernia and ileus have been reported in 21% and 5.4%, respectively of all late postoperative complications of colostomy [4,5]. The patient of this report suffered from a complication of paracolostomy hernia after abdominoperineal proctectomy and, as the result, adhesive ileus.

CASE REPORT

A 62-year-old male patient complained of pain in the upper abdomen, nausea and vomiting, and visited our hospital. Abdominal radiographs of this patient revealed the enlarged intestinal tract. The patient had been diagnosed to be a rectal cancer 24 years ago and undergone abdominoperineal proctomy and then colostomy. He had been hospitalized 5 times under the diagnosis of adhesive ileus to receive conservative treatment. Laboratory values revealed the WBC increase to 10900 (/mm³) and the Ht of 42 (%) indicating dehydration. The patient was admitted and treated this time by parenteral fluid therapy and decompression therapy of the intestinal tract using a

long tube and these measures decreased the WBC value to the normal range. Enterography conducted

Fig. 1. Enterography shows the jejunal and stenosis around the colostoma.

on the 7th postoperative day revealed the jejunal bending and stenosis around the colostoma in the lower left abdomen (Fig. 1). Based on these findings, laparoscopy was conducted to treat paracolostomy hernia. The laparoscopic observation revealed hernia around the colostoma made directly from the abdominal cavity and, as the result, adherence of the bend-

ing jejunum to the inside (Fig. 2) and such condition seemed to have caused ileus. Enterosynechotomy was conducted laparoscopically and then, to treat paracolostomy hernia, the descending colon was sutured and fixed to the posterior peritoneum (Fig. 3). It took 180 minutes for the operation. Oral nutrition was initiated from the following day of operation and the patient was discharged in the second postoperative week.

DISCUSSION

The treatment for this case was unique in repairing paracolostomy hernia from the inside of the abdominal cavity as well as conducting laparoscopic ileus operation. Londo-Schimmer et al. [5] reported that the complication of paracolostomy hernia occurred in 43 out of 203 patients (21.1%) after colostoma installation. In our institution, however, the paracolostomy hernia complication occurred in 6 out of 427 patients (1.4%) who had colostoma (Table 1). And it caused ileus in the case of this study. Laparoscopic ileus operation has been reported to have benefits of less postoperative pain, earlier recovery and less postoperative recurrence of adhesion [1-4]. However, the indications of laparoscopic ileus operation have not been established, as some cases are difficult to be laparoscopically operated and others need enterotomy. The indications of laparoscopic ileus operation are reported to be: 1) the patients who are intractable by conservative treatments, 2) the patients who, despite of the improvement of symptoms by conservative treatments, present the intestinal stenosis by enterography and suffer from recurrence of ileum at taking food, 3) the patients who present ileus symptoms repeatedly. Further Nakagawa et al. conducted laparoscopic operation of adhesive ileus and reported that the cases with adherence of the bending intestinal tract to the abdominal wall or the cases with ileus caused by funicular substances would be good indications

Fig. 2. Laparoscopic observation reveals the adherence of bending jejunum to hernia around colostoma.

Fig. 3. Then paracolostomy hernia is treated and the descending colon is fixed to the peritoneum laparoscopically.

TABLE 1.
Colostomy complications (n=427)

	No. of Patients	Rate (%)
Paracolostomy hernia	6	1.4
Skin complication	64	15.0
Prolapse	7	1.6
Stenosis	26	6.1
Ileus	9	2.1

because of laparoscopic separation [6]. As laparoscopic operation has been recently reported to be conducted also for diagnostic purpose in the cases of ileus, both the diagnosis and treatment of paracolostomy hernia was conducted laparoscopically in the present case. Laparoscopic operation seems to have benefits of little operative invasion, reduction of recurrent postoperative adhesion and consequent prevention of adhesive ileus, and treatability of hernia inside the abdominal cavity and also concomitant diseases including cholelithiasis.

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