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What is This?
Single Access Laparoscopic Ileocecal Resection in Complicated Crohn’s Disease

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Introduction

Laparoscopic approach to Crohn’s disease has gained good acceptance in selected, high-volume centers. Natural orifice transluminal endoscopic surgery and single access laparoscopic surgery are, at the moment, the latest frontier of minimally invasive surgery.1,2

The single laparoscopic access offers excellent cosmetic results (the umbilicus will hide a surgical scar) and may be associated with decreased postoperative pain, shortened postoperative hospitalization, and retains the ability to be converted to standard multiport laparoscopic surgery if needed.3 It allows to perform surgical procedure with standard surgical instruments although the complexity of the procedure may increase because of the reduced possibility of triangulation.4

We hereby report the first case of complicated Crohn’s disease approached with this new technique at our institution last September 2009.

Patient and Operative Technique

The patient was a 27-year-old woman with a 5-year history of Crohn’s disease referred for surgery because of severe stenosis and multiple fistulas of terminal ileum. She had previously a caesarean that left a hypertrophic scar.

Preoperative and intraoperative preparation was as for standard laparoscopy. A 3.5-cm vertical incision was made across the umbilicus, to place 3 of 10/12 mm trocars in the midline. A Johanne forceps and radiofrequency scalpel were use to accomplish the entire dissection.

The terminal ileum was freed from the parietal wall dividing the sinuses tract. Once the ileum was freed from the parietal wall, the ascending colon was dissected in a standard fashion up to the transverse colon. The intestine was divided using an endo-stapler. The abdominal fascia was opened over the incision left from the 3-port access. The specimen was exteriorized and a side to side anastomosis was stapled. Operative time was 105 minutes, and blood loss was insignificant. The protocol used for pain control was the same as for laparoscopic ileocolonic resection in our unit.5 The patient made uneventful recovery and went home on postoperative day 5. Histology confirmed terminal ileum complicated Crohn’s disease.

Discussion

Single access laparoscopic surgery reduces the surgical trauma to the abdominal wall and minimizes the risk of epigastric vessels injury during trocars placement. It does offer cosmetic advantage compared with a standard laparoscopic approach.

Furthermore, it is always possible to convert the procedure to conventional multiport laparoscopic surgery and, in operations requiring the resection of tissues or organs, the same ports site access can be use to retrieve the specimen.

In patients with Crohn’s disease, single incision laparoscopic surgery seems particularly appealing. There is a definite aesthetic advantage, especially important in a young and feminine population and it saves most of the integrity of the abdominal wall and this may be of some importance in case of future ileostomy or colostomy.

The procedure described herein was feasible and seemed safe in this preliminary experience. During the operation, the instruments often cross each other and the surgeon and his/her assistant may find this frustrating for most of the procedure.4 However, it is probably true that this problem can be partially solved with the design of

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instruments developed specifically for this minimally invasive surgery.

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**References**


