

8.1 Introduction

Proctocolectomy and ileorectal anastomosis is a surgical procedure indicated for familial adenomatous polyposis proposed by Lockhart-Mummery [1] that takes into account the quality of life. In recent years, this method has represented a step forward, and subtotal proctocolectomy (total colectomy and lower anterior resection of the rectum) has begun to be performed using laparoscopic surgery procedures. Lymph node dissection for combined colorectal cancer is also possible with laparoscopic surgery.

In addition, using the intersphincteric resection of the rectum (ISR) procedure, it is possible to resolve almost any issue encountered in colorectal surgery, for example, ileal pouch-anal anastomosis (IPAA).

Through the understanding the fascial composition of the large intestine and integrating the surgical procedure to each site of the large intestine, subtotal and total coloproctectomy can be performed.

8.2 Resection Range and Degree of Lymph Node Dissection

The area of the entire colon and most of the rectum is considered the resection range. For comorbid cancers, laparoscopic subtotal proctocolectomy and subtotal proctocolectomy with laparotomy are similar in terms of resection range and degree of lymph node dissection, with respect to other interventional approaches in the abdominal cavity. Lymph node dissection of the transverse colon is performed through a supra-umbilical incision.

8.3 Operative Procedures

The patient is placed in the head-down position on the operating table in laparoscopic view:

1. Mobilisation of the right colon is performed using the medial-retroperitoneal approach. (See the Chap. 6).
2. Mobilisation of the sigmoid colon is performed using the medial approach, and the rectum is divided by total mesorectal excision (TME). (See the Chaps. 3 and 4).
(In the case of the ISR procedure, the rectum is dissected as far as possible to the anal canal; and if possible, the sigmoid colon is divided. (See the Chap. 4)).
3. Mobilisation of the left colon is performed. (See the Chap. 7).

Placing the patient in the supine position:

4. Mobilisation of the splenic flexure is continued by dissection. (See the Chap. 7).
5. Mobilisation of the hepatic flexure and the complete mobilisation of the right colon are performed. (See the Chap. 6).
6. Finally, with a small auxiliary incision placed at the supra-umbilical midline, the entire colon and the rectum is removed outside of the abdominal cavity, and the vascular ligation of the transverse colon is performed, preserving the ileocolic vessels.
7. The ileum is mounted using the anvil head of the PCEEA™ and an ileorectal anastomosis is created using the double-stapling method.

Reference

1. Lockhart-Mummery HE, Dukes CE, Bussey HJR. The surgical treatment of familial polyposis of the colon. *Br J Surg.* 1956;43:476–81.