

## Department of Surgery and Cancer

# Laparoscopic Assisted Versus Laparoscopic Ileocolic Anastomosis in Right Hemisphere Colectomy

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**Abstract:-** Laparoscopy was developed as the recommended surgical solution for most intra-abdominal disorders. The first laparoscopic collections were documented decades ago, but most collections are now performed in an open manner. The delay in adoption is primarily due to initial concerns about meteorological restrictions and serious concerns about recurrence of the trocar site on laparoscopy. It is currently based on a major randomized controlled trial. Surgical outcomes are caused by factors such as clinical outcomes such as surgical treatment. Minimally invasive collection is becoming more attractive. However, laparoscopy requires special equipment, long processing times, and a rigorous learning curve. No studies have suggested that a mini-peritoneal incision using conventional surgical techniques and equipment yields equally desirable results. The purpose of this analysis was to evaluate the minimal peritoneal incision and extra-articular anastomosis of the laparoscopic-assisted right collection using the open right collection. Based on recent literature reviews, there is little evidence provided by the proper choice of mini-peritoneal incision. There is no evidence of predominance of open right colectomy with a mini-peritoneal incision in terms of a better postoperative line or a better long-term outcome. The short-term results of optimal collection using mini laparoscopy can only be compared in certain cases using laparoscopy. Currently, there is no reliable and important voucher to initiate proper collection using a mini-peritoneal incision.

## I. INTRODUCTION:

Laparoscopic right colectomy (LRC) requires a high degree of expertise. Vocational training is recommended to perform these procedures safely and effectively. There are differences in training protocols between surgical teams, and many authors stress the need to agree on key LRC initiatives. The difficulties described in performing LRC are beyond the scope of a complete mesocolic excision in the surgical treatment of colon cancer. Completely different resources are proposed for LRC, complete mesocolic Resuscitation, with good oncological results by skilled hands. Further laparoscopic techniques for right colon surgery are described: complete laparoscopic right colectomy (laparoscopic vessel ligation and bowel mobilization, extracorporeal anastomosis), laparoscopic

facilitated right colectomy (laparoscopic bowel mobilization, extracorporeal vessel ligation and anastomosis), , manually correct right colectomy (with the help of laparoscopic technique by mini laparoscopic examination) More recently, single incision right colon Complete laparoscopic procedure with intracorporeal anastomosis through multichannel single trocar or trocars inserted through one short incision). Laparoscopic-assisted right colectomy with extracorporeal anastomosis is one of the most commonly used procedures. The purpose of this study was to compare laparoscopic support and open circumcission.

### ➤ *Indications*

- Adenomatous polyps not amenable to colonoscopy resection
- Crohn disease and its complications
- Bleeding secondary to diverticulosis or arteriovenous malformation
- Diverticulitis
- Obstruction
- Colon tumors (benign or malignant)

## II. MATERIALS AND METHODS

Use the PubMed, Scopus, Scielo, and Web of Scientific databases with the following keywords: Laparoscopic colectomy, Mini abdominal surgery; resection of the right colon; surgical procedure; surgical education; surgery; laparoscopic examination. A total of 20 articles in English and Spanish published between 2013 and 2020 were selected, of which 12 were included in this study, with the latest meta-analysis on this topic, randomized, prospective and positive clinical trials on this topic. Includes retrospective studies.

### ➤ *Surgical technique:*

Various methods of laparoscopic assisted right colectomy have been noted. These methods differ mainly in trocar position, sequence of steps and instrumental mode. (Isoperistaltic, anisoperistaltic, end to end, side to side, side to side, hand sewn, stitched).

The patient is placed in a supine position, leaning to the left. The legs are raised slightly above the head (Trendelenberg position). This state can be changed as needed during the operation. Typically, three to five trackers

are used. Recently, inter-transit methods have been preferred. The vascular plane is usually present between the right mesenteric and retro-peritoneal structures, exposing the medial lateral, duodenum, and vascular integration. In the roots of the superior mesenteric vein and the superior mesenteric artery, evacuation of the alveolar ducts and ltd is a basic step. The proper colic vessels, if any, are cut off. The medial collateral artery origin is found. The right medial collateral joins them by identifying the branch of the artery and the blood vessel. The gastrointestinal stem (Henley) can be a problematic area at times due to much anatomy. Gastric and pancreatic branches should be protected whenever possible. The right side of the gastrointestinal ligament divides with the gastrointestinal tract. The right dispersion of the great omentum, the lateral peritoneum distribution of the hepatic and ascending elastic intestine, and the movement of the terminal ileum are completed. After that, a transectoral minilaparotomyoperation is performed. The portion of the iliac and colonial mesentery is extra physically removed, the right intestine is rediscovered along the terminal ileum, and an extracorporeal isocolic anastomosis is performed with manual staples or sutures. In some cases, technical problems have prevented the mesentery windows from closing.

#### ➤ *Postoperative Care:*

After surgery, all patients were treated equally in terms of nutrition, mobility and postoperative care. Postoperative pain management was performed by patient-directed analgesia (PCA), continuous infusion of morphine, or epidural anesthesia. When the patient's PCA was pumped, morphine requirements were recorded for the first 3 days after surgery. At the beginning of the study, it was customary to remove the nasogastric tube in the morning after surgery. Currently, the nasogastric tube was removed at the end of the operation. Oral intake was started with clear fluids and is already being tolerated. The patient was discharged after not being able to tolerate a normal diet. Leaving the hospital at the time of admission was appreciated.

### III. DISCUSSION

This study found that laparoscopic iliac resection is possible with low conversion rates and acceptable operating times. The need for postoperative morphine was low in the laparoscopic group, although it is not significant. This can be explained by the limited size of the sample. In addition, the laparoscopic approach was safer in terms of postoperative disease and was significantly lower than that of open surgery. This difference was due to the higher complication rate in the open group. The difference in postoperative stay was 2 days after supporting the laparoscopic approach. Neither the patient nor the medical staff was blind, so these numbers should not be interpreted with caution. Previous studies have tried to blind patients and medical staff because of the nature of the procedure, but despite all the measures for blind staff and patients, it is very difficult to blind the procedure. Because it was there, it was canceled. Neither group had any dietary restrictions nor may improvement in mobility, but the non-blindness in favor of

the laparoscopic group still be a cause for prejudice. Studies comparing laparoscopy and open techniques have led to further criticism of hospitalization as a parameter since the introduction of a "faster" protocol for colon surgery. Rapid multimodal perioperative care has shown that patients can be discharged within 3 to 4 days of surgery even after an open partial colonoscopy. However, the fast multimodal approach requires patients and medical staff, and not all hospitals perform equally well. However, the expedited protocol further narrows the gap between open access and laparoscopic access. There is currently no clear evidence of other potential benefits of a laparoscopic approach, such as: B. easier check-up, less bowel obstruction or a lower incisional hernia rate. The present study shows that laparoscopically assisted ileocolic resection is safe and inexpensive compared to open ileocolic resection in patients with early onset Crohn's disease. As a result, laparoscopy is the preferred method for treating distal ileitis in Crohn's disease, and laparoscopic surgeons ensure low conversion rates, acceptable hours of operation, and disease reduction.

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