Laparoscopic Left Colonic Resection: Current Perispective

An Essay
Submitted For Partial Fulfillment of Master Degree In General Surgery

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Acknowledgment

I would like to express my profound and sincere appreciation to **Prof. Dr.Abd-Elghany Mahmoud Elshamy,** Professor of general surgery, Faculty of medicine, Ain Shams University**,** for his great support for me in achieving this work, and without him, this research would not come to light.

I would like to express my sincere appreciation for the memory of **Dr. Hossam Elsadik,** Assistant Professor of General Surgery, Faculty of Medicine, Ain Shams University, for his encouragement to me and for helping me to pass every obstacle I faced

I would like also to express my profound and sincere appreciation to **Dr. Sherif Abd El-Hady,** Lecturer of general surgery, Faculty of medicine, Ain Shams University, for his great effort in achieving and reviewing this work and for his great support to me.

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Laparoscopic colorectal surgery has been attracting in attention for its capacity to improve the quality of life of patients. Laparoscopic colectomy for benign and malignant lesions has become an increasingly accepted concept. There is increasingly compelling evidence that Laparoscopic colectomy does indeed provide a number of advantages, including shorter hospital stay, reduced postoperative ileus, earlier resumption of oral nutritional intake fewer metabolic dearrangement reduced pain, and improved cosmesis **(Senagore et al., ٢٠٠٥).**

Laparoscopic management of colonic diverticular disease has emerged as an important adjunct to the existing armamentarium which offers earlier restoration of intestinal function and resumption of normal diet, less postoperative pain and lower morbidity, thus facilitating earlier discharge from hospital and quicker return to normal daily activity **(Weber et al, ٢٠٠٧).**

However, there are disadvantages to this approach, namely, it is difficult to obtain an image of the entire view of the operative field, and organs and lesions cannot be

manipulated directly by the surgeon during surgery. For this reason, it takes a relatively large amount of time to ligate vessel, which can vary between patients. Furthermore, vessels and organs can be damaged during lymph nodes dissection under laparoscopic guidance, leading to heavy bleeding that prevents the surgeon from having access to a good view of the operative filed **(Matsui et al., ٢٠٠٥)**.

Laparoscopic approach progress is limited due to the fact that it needs a high degree of laparoscopic skills , expensive equipment , and a long operating time . Its learning curve is steep . Above all , its oncological safety is still uncertain when it comes to tumor spillage , early recurrence and adequacy of resection **(Boller AM et al , ٢٠٠٧)**.

Several important new studies have demonstrated the benefits & safety of laparoscopic colorectal surgery, making it now the preferred approach in the surgical management of any colorectal disease ***(Veldkamp et al., ٢٠٠٥).***

The postoperative complications associated with laparoscopic colorectal surgery are essentially the same as those for open surgery. Certain other complications, such as port site hernia, are specific to the laparoscopic approach. The overall rate of complications is approximately ٩٪. Ileus and small bowel obstruction, both operative and nonoperative, are the most common causes for readmission (in about ٤٪ of cases). Abdominal abscess and anastomotic leak occur in ١,١٪ and ٠,٧٪ of cases, respectively. Other complications include fever, dehydration, pulmonary embolus, wound infection, and cardiac arrhythmias. Internal hernias, although commonly reported with other minimally invasive procedures such as Roux-en-Y gastric bypass are occurrence after laparoscopic colectomy**.** ***(Senagore et al., ٢٠٠٦)***

Aim of the work

The aim of this study to review the recent advances in laparoscopic left colectomy and evaluate the new equipments, techniques, advantages, disadvantage of laparoscopic colectomy.

Laparoscopic Anatomy Of The Colon

Laparoscopic anatomy Of The Colon

This chapter will provide an outline for viewing the major structures of the abdominal cavity, and will illustrate the important ones most surgeons will need to recognize during laparoscopic colorectal surgical procedures **(Milsom et al, ٢٠٠٦)**.

The Right Upper Quadrant (RUQ):-

To best see in the RUQ, the patient should lie in the reverse Trendelenburg position with the body tilted with the right side up. First, the liver should be assessed overall for its shape, size, and surface texture (Figure ٢.١). Also demonstrable is the under surface of the right diaphragm (Figure ٢.٢). Generally, the umbilical port is best for doing this, with instruments in the other ports used for lifting up the edge of the liver and looking underneath at the porta hepatis, and the gallbladder (Figure ٢.٣). Also visible is the hepatic flexure of the right colon with the duodenum, in thinner patients the pancreatic head, gallbladder, and the inferior aspect of the right lobe of the liver (Figure ٢.٤) **(Gray and Moshe, ١٩٩٧)**.

The Left Upper Quadrant ((LUQ)

By sweeping the laparoscope across the abdomen to the left side and tilting the left side of the body up, segments II and III of the liver can be easily inspected (Figure ٢.٥). The esophageal hiatus, the caudate lobe through the hepatogastric ligament, and the cardia of the stomach can be demonstrated by lifting up the left lobe with atraumatic grasper (Figure ٢.٦). Also demonstrable is the

undersurface of the left hemidiaphragm, and the spleen. The splenic flexure, the splenocolic ligament, and the omentum may be easily visualized, along with the transverse colon (Figure ٢.٧). The body of the pancreas may often be seen indenting the transverse mesocolon in the left upper quadrant (LUQ) as well **(Thiele et al, ٢٠٠٦)**.

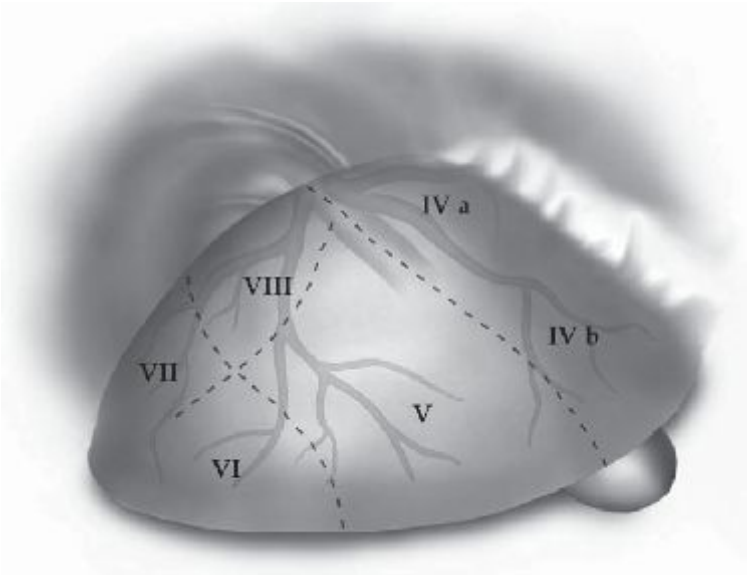

Figure ٢.١. At the start of a laparoscopy, the liver to the right of the falciform ligament may be viewed broadly over its surface (hepatic segments of Couinaud and the hepatic veins are depicted in the drawing) *(***Gray and Moshe, ١٩٩٧)**.