Ain Shams University
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Laparoscopic Colectomy

An Essay

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By

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LIST OF ABBREVIATIONS

APR	Abdominoperineal resection
ASA	American society of anesthesiologists
CI	Contraindication
CLASICC	Conventional versus laparoscopic assisted surgery in colorectal cancer
CO2	Carbon dioxid
COST	The clinical outcomes of surgical therapy
CRC	Colorectal cancer
Etc.	Et cetera
HALS	Hand-assisted laparoscopic surgery
IMA	Inferior mesenteric artery
IMV	The inferior mesenteric vein
LC	Laparoscopic colectomy
LI	The laparoscopic instruments
LLQ	The left lower quadrant
LUQ	The left upper quadrant
MAS	Minimal access surgery
PC	Open colectomy
PEEP	Positive end expiratory pressure
PS	Physical status

Introduction

INTRODUCTION

Improved laparoscopic skills and introduction of new instruments have led to broad application of laparoscopy in benign and malignant diseases. ***(Leung, et al., 2011)***

Laparoscopic colorectal surgery for benign diseases has met with great enthusiasm and widespread acceptance. Many surgeons have been reluctant about its application in patients with inflammatory bowel disease. Randomized and comparative studies have been reported to compare laparoscopic-assisted ileocolic resection with the open procedure for Crohn's disease, indicating the feasibility of the laparoscopic procedure in selected patients. ***(Alabaz, et al., 2000)***

Laparoscopic colon surgical techniques have been applied to segmental Resections, total colectomy, and proctocolectomy over the past decade. While the use of minimally invasive techniques was once restricted to benign colorectal conditions, the recent Clinical Outcomes of Surgical Therapy (COST) has demonstrated the feasibility, oncologic adequacy, and long-term safety of laparoscopy in malignant disease of the colon. This is in addition to well-characterized short, and intermediate-term clinical benefits, including less post-operative pain and narcotic requirements, faster recovery of bowel function, and shorter stay in hospital. ***(Guillou, et al., 2005)***

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, and recurrence are specific to the Iaparoscopic approach. Abdominal abscess and anastomotic leak occur in 1.1% and 0.7% of cases, respectively. Other

Complications include fever, dehydration, pulmonary embolus, wound infection, and cardiac arrhythmias. ***(Senagore and Delaney, 2012)***

Septic shock with diffuse peritonitis and carcinoma in the end stage are absolute contraindications of laparoscopic colectomy, while morbid obesity, advanced cirrhosis, and multiple operations with severe adhesions are relative contraindications. ***(Nelson, et al., 2004)***