

Minimal invasive surgery (General Laparoscopic surgery)

**By SHYAKA Olivier
Medtronic Nurse**

ALSO[®]

ALSO

Objectives

- Develop and enhance operative technique and clinical skills in the pre- and post-operative management in advanced gastrointestinal, hepatopancreatobiliary, colorectal, hernia and solid organ surgery with a major emphasis on minimally invasive techniques and emerging technology.
- Develop and implement research projects related to the content areas of the fellowship. Manuscript preparation, poster preparation, oral presentation, and/or book chapter preparation are expected.

ABBREVIATIONS

ALSO

- ❖ **MIS** : Minimal invasive Surgery
- ❖ **SILS**: Single incision laparoscopic surgery
- ❖ **MITG**: Minimal Invasive Therapy Group
- ❖ **LESS**: Laparoscopic Endoscopic Single site surgery
- ❖ **LAI**: Laparoscopic Artificial Insemination
- ❖ **LCBDE**: Laparoscopic Common Bile Duct Exploration
- ❖ **LC**: Laparoscopic Cholecystectomy
- ❖ **LA** : Laparoscopic Appendectomy
- ❖ **LARVH**: Laparoscopic Assisted Radical Vaginal Hysterectomy

ALSO

Introduction to Minimal invasive surgery

Laparoscopic surgery is a minimally invasive technique for performing surgery.

In the past, it was commonly used for gynecologic surgery and for gall bladder surgery. Over the last 10 years the use of this technique has expanded into intra abdominal operations and investigations. Laparoscopic surgery uses several 0.5-1cm incisions (port), Through that port we access the abdomen .

ALSO } **Con't**

At the beginning through one Port, the abdomen is inflated with carbon dioxide to provide a working space, The laparoscope transmits images from the abdominal cavity to high-resolution video monitors in the operating room. During the operation the surgeon watches detailed images of the abdomen on the monitor. This system allows the surgeon to perform the same operations as traditional surgery but with smaller incisions.

LAPAROSCOPIC TOWER

ALSO

Medical HD Monitor

Video Capturing unit

Light Source unit

CO₂ Insufflation Unit

Digital Video storage system



WHAT ARE THE ADVANTAGES OF LAPAROSCOPIC SURGERY?

ALSO

- The advantages of laparoscopy are numerous and include the following:
 - ❖ Smaller, more discrete scars
 - ❖ Less post-operative discomfort
 - ❖ Faster recovery/short Hospital stay
 - ❖ Reduced risk of complications
 - ❖ (Gyne) Fibroids, or abnormal growths in the uterus, Hysterectomy under laparoscopy, Ovarian cyst, ectopic Pregnancy

ALSO

Disadvantages of Laparoscopic surgery

- Bleeding
- Severe Adhesions
- Failure
- injury or trauma to a particular organ
- Sore Throat due to Intubation
- Vomiting due to Anesthesia medications

ALSO

INDICATION OF GENERAL LAPAROSCOPIC SURGERY

- ❖ Hernia repair Surgery
- ❖ Gallbladder Removal (Cholecystectomy)
- ❖ Appendectomy
- ❖ Colon Surgery: Colectomy, biopsy
- ❖ Adhesiolysis
- ❖ Diagnostic laparoscopy

ALSO

Contraindication For Laparoscopic surgery

- Severe cardiovascular Disease
- Bowel Obstruction
- Acute Peritonitis
- Several Previous Surgeries that may lead to Adherences
- Peritoneal and intraabdominal adhesions
- Large intraabdominal masses

ALSO

Conclusion

Most patients can safely undergo laparoscopic procedures.

In patients with severe heart or lung disease some procedures may be more safely performed without general anesthesia. Consequently, these patients may have certain operations done with heavy sedation, numbing medicine and an open incision instead. Obesity is not a contraindication for laparoscopic surgery. In fact, this type of procedure is often easier on these patients than open surgery. Patients who have had multiple prior operations may not be candidates for minimally invasive surgery due to scar tissue, which can build up after surgery and make it difficult to safely do laparoscopic procedures. Only surgeon is the best person to determine if a particular operation should be done under Open or laparoscopic surgery.

ALSO



END