Laparoscopy
(Surgery With Keyhole Incisions)
by Editorial Staff and Contributors

En Español (Spanish Version)

View an animated version of this procedure:

- [Windows Media Player]
- [Quicktime]
- [MPEG]

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Definition

This surgery is done through several keyhole incisions. A fiberoptic tool is inserted through one of the incisions to view the inside of the abdomen. Surgical tools are inserted through other incisions.

Laparoscopic Instruments Being Placed in the Abdomen

Parts of the Body Involved

- Abdomen
- Female reproductive system
Reasons for Procedure

The procedure is most often done to:

- Diagnose the cause of acute or chronic abdominal or pelvic pain
- Visualize and get a tissue sample from a mass in the abdomen
- Evaluate the cause of infertility
- Evaluate source of fluid accumulating in the abdomen
- Monitor the status of previously treated cancer
- Assist in determining the stage of certain cancers

Many types of surgery can now be done laparoscopically, such as:

- Hernia repair
- Biopsy of abdominal organs
- Appendectomy
- Colectomy
- Gallbladder or gallstone removal
- Tubal ligation
- Ectopic pregnancy surgery
- Egg retrieval for assisted reproductive technology
- Hysterectomy
- Fibroid tumor removal
- Adrenal gland removal
- Removal of part of the liver
- Splenectomy
- Lysis of adhesions in abdomen
- Endometriosis
- Ovarian cyst
- Incontinence procedures

Risk Factors for Complications During the Procedure

- Heart or lung condition
- Obesity
- Previous abdominal surgery

What to Expect

Prior to Procedure

Depending on the reason for your surgery, your doctor may do the following:

- Physical exam and review of medications
- Blood tests (e.g., pregnancy test, liver function, electrolyte status)
- Urinalysis to detect urinary tract infection and diabetes
- Ultrasound—a test that uses sound waves to visualize the inside of the body
- CT scan—a type of x-ray that uses a computer to make pictures of the inside of the body
- MRI scan—a test that uses magnetic waves to make pictures of the inside of the body

In the days leading up to your procedure:
• Review your medications with the doctor. You may need to stop taking some drugs.
• Depending on the type of surgery, you may need to take a laxative or use an enema.
• Arrange for a ride home.
• The night before, eat a light meal. Unless told otherwise by your doctor, do not eat or drink anything after midnight.

Anesthesia

General anesthesia or local anesthesia with sedation

Description of the Procedure

The surgeon cuts a small opening in the abdomen. The location of this incision may be near the navel or in the lower abdomen. A needle is inserted and used to inject carbon dioxide gas into the abdomen. The gas causes the abdominal cavity to expand. This makes it easier to see the organs. The doctor then inserts the laparoscope. The laparoscope lights, magnifies, and projects an image onto a screen. The organs are inspected.

If necessary, several other incisions are made in the abdomen. The doctor then inserts tiny tools that are used to take biopsies or do surgery. After, the incisions are closed with stitches or clips.

After Procedure

A laboratory will examine the fluid or tissue.

How Long Will It Take?

Less than one hour (depends on the type of procedure)

Will It Hurt?

Anesthesia prevents pain during the procedure. You may have soreness for a couple of days during recovery. But, you will receive pain medication. You may also feel bloated or have pain in your shoulder from the gas. This can last up to three days.

Possible Complications

• Infection
• Gas embolism
• Excessive bleeding
• Damage to blood vessels or organs (sometimes requires immediate open surgery for repair)
• Problems related to anesthesia
• The need for open surgery rather than laparoscopic surgery

Average Hospital Stay

If the procedure is done to make a diagnosis, you will probably be able to go home the same day. If you are having surgery, you may need to spend a few days in the hospital.

Postoperative Care

Once home, follow your doctor's instructions, such as:

• Remove the dressing the morning after surgery.
• Avoid heavy lifting.
• Do not drink carbonated beverages for two days.
Outcome

Depending on the procedure, you should be able to go back to regular activities in about one week. If it was done to help diagnose a condition, your doctor will suggest treatment options. Biopsy results may take 3-5 days.

Call Your Doctor If Any of the Following Occurs

- Signs of infection, including fever and chills
- Redness, swelling, increasing pain, excessive bleeding, or discharge from the incision site
- Headache, muscle aches, feeling faint or dizzy
- Difficulty urinating
- Complications of general anesthesia (eg, cough, shortness of breath, chest pain, severe nausea or vomiting)

RESOURCES:

National Library of Medicine
http://www.nlm.nih.gov/

Society of American Gastrointestinal Endoscopic Surgeons
http://www.sages.org/

CANADIAN RESOURCES:

Health Canada
http://www.hc-sc.gc.ca/index_e.html/

Women's Health Matters
http://www.womenshealthmatters.ca/index.cfm/

REFERENCES:


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