# The American College of Obstetricians and Gynecologists

WOMEN'S HEALTH CARE PHYSICIANS

## Laparoscopy

Laparoscopy is a type of surgery. It is used to diagnose and treat many health problems. Over the past 20 years, laparoscopy has become fairly common. It often can be performed as an outpatient procedure. This pamphlet explains

- laparoscopic surgery
- reasons for having laparoscopy
- what happens during the procedure
- what you can expect during your recovery
- risks and benefits of laparoscopy

### **Laparoscopic Surgery**

Laparoscopy is a way of doing surgery using small incisions (cuts). It is different from "open" surgery where the incision on the skin can be several inches long. Laparoscopic surgery sometimes is called "minimally invasive surgery."

Laparoscopic surgery uses a special instrument called the *laparoscope*. The laparoscope is a long, slender device that is inserted into the abdomen through a small incision. It has a camera attached to it that allows the *obstetrician–gynecologist* (*ob-gyn*) to view the abdominal and pelvic organs on an electronic screen. If a problem needs to be fixed, other instruments can be used. These instruments usually are inserted through additional small incisions in the abdomen. They sometimes can be inserted through the same single incision made for the laparoscope. This type of laparoscopy is called "single-site" laparoscopy.

### **Reasons You May Have Laparoscopy**

Laparoscopy can be used to perform some of the surgical procedures that were once possible only with open surgery. For example, *tubal sterilization* can be done using laparoscopy. Laparoscopy is one of the ways that *hysterectomy* can be performed. In a laparoscopic hysterectomy, the uterus is detached from inside the body. It can be removed in pieces through small incisions in the abdomen or removed in one piece through the vagina.

Laparoscopy also may be used to look for the cause of symptoms like *chronic pelvic pain*, a pelvic mass, or *infertility*. If a problem is found, it often can be treated during the same surgery. Some medical conditions that laparoscopy is used to diagnose and treat include the following:

- *Endometriosis*—If you have signs and symptoms of endometriosis and medications have not helped, a laparoscopy may be recommended. The laparoscope is used to see inside your pelvis. If endometriosis tissue is found, it often can be removed during the same procedure.
- *Fibroids*—Fibroids are growths that form inside the wall of the uterus or outside the uterus. Most fibroids are *benign* (not cancer), but a very small number are *malignant* (cancer). Fibroids can cause pain or heavy bleeding. Laparoscopy sometimes can be used to remove them. Factors that determine whether laparoscopy can be used include the number of fibroids you have, their size, and their location.
- Ovarian *cyst*—Some women have cysts (fluid-filled sacs) that develop on the ovaries. Over time, ovarian cysts often go away without treatment. But if they do not, your ob-gyn may suggest that they be removed with laparoscopy.
- Ectopic pregnancy—Laparoscopy may be done to remove an ectopic pregnancy.
- Pelvic floor disorders—Laparoscopic surgery can be used to treat urinary incontinence and pelvic organ prolapse.
- Cancer—Some types of cancer can be removed using laparoscopy.

## **What Happens During Surgery**

Laparoscopy often is done as outpatient surgery. You usually can go home the same day. More complex procedures, such as laparoscopic hysterectomy, may require an overnight stay in the hospital. Laparoscopy usually is performed with *general anesthesia*. This type of anesthesia puts you to sleep.

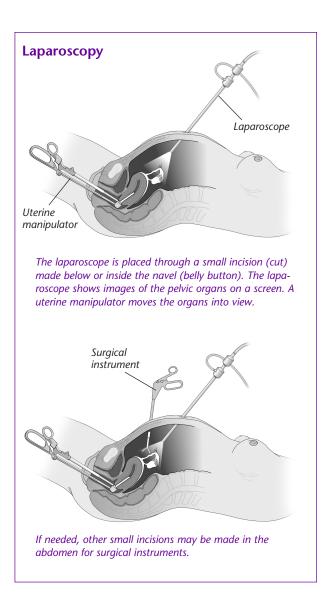
After you are given anesthesia, a small incision is made in or below your navel (belly button) or in another area of your abdomen. The laparoscope is inserted through this small incision. During the procedure, the abdomen is filled with a gas. Filling the abdomen with gas allows the pelvic reproductive organs to be seen more clearly.

The camera attached to the laparoscope shows the pelvic organs on a screen. Other small incisions may be made in the abdomen for surgical instruments. Another instrument, called a uterine manipulator, may be inserted through the vagina and *cervix* and into the uterus. This instrument is used to move the pelvic organs into view.

After the procedure, the instruments and most of the gas is removed. The small incisions are closed. There will be small scars that usually fade over time.

## **Your Recovery**

After your surgery, you will be moved to the recovery room. You will feel sleepy for a few hours. You may have some nausea from the anesthesia. If you had



outpatient surgery, you will need to stay in the recovery room until you can stand up without assistance and empty your bladder. You must have someone drive you home.

For a few days after the procedure, you may feel tired and have some discomfort. You may be sore around the incisions made in your abdomen and navel. The tube put in your throat to help you breathe during the surgery may give you a sore throat. Try throat lozenges or gargle with warm salt water. You may feel pain in your shoulder or back. This pain is from the small amount of gas used during the procedure that remains in your abdomen. It goes away on its own within a few hours or days. If pain and nausea do not go away after a few days or become worse, you should contact your ob-gyn.

Your ob-gyn will let you know when you can get back to your normal activities. For minor procedures, it is often 1–2 days after the surgery. For more complex procedures, such as hysterectomy, it can take longer. You may be told to avoid heavy activity or exercise.

Contact your ob-gyn right away if you have any of the following signs or symptoms:

- Fever
- Pain that is severe or gets worse
- Heavy vaginal bleeding
- Redness, swelling, or discharge from the incision
- Fainting
- · Inability to empty your bladder

### **Risks and Benefits**

Laparoscopy has many benefits. There is less pain after laparoscopic surgery than after open abdominal surgery, which involves larger incisions, longer hospital stays, and longer recovery times. Recovery from laparoscopic surgery generally is faster than recovery from open abdominal surgery. The smaller incisions that are used allow you to heal faster and have smaller scars. The risk of infection also is lower than with open surgery.

As with any surgery, there also is a small risk of problems with laparoscopy. Laparoscopy can take longer to perform than open surgery. The longer time under anesthesia may increase the risk of complications. Sometimes complications do not appear right away but occur a few days to a few weeks after surgery. Problems that can occur with laparoscopy include the following:

- Bleeding or a hernia (a bulge caused by poor healing) at the incision sites
- Internal bleeding
- Infection
- Damage to a blood vessel or other organ, such as the stomach, bowel, bladder, or *ureters*

The risk of a problem occurring is related to the type of surgery that is performed, whether you have other medical conditions, such as diabetes mellitus, and whether you have had previous surgery. Surgery also is riskier if you are obese. Obesity increases the risk of wound healing problems, infections, and blood clots (a condition called *deep vein thrombosis [DVT]*).

In a few cases, the surgeon starts to do a laparoscopy but then decides that open surgery would be a better option. It is not completely possible to predict beforehand how the surgery will be done. It is best to be prepared for the possibility that you may not be able to have laparoscopic surgery and instead need open surgery, which has a longer recovery time.

Before deciding to have any type of surgery, make sure that you know about other ways your condition can be treated, such as medications. Discuss what will be done during your surgery and the specific risks associated with your surgery.

### Finally...

Laparoscopy is a way to perform surgery without making a large incision. It has many benefits over other types of surgery but also carries some risks. Keep in mind that laparoscopy is still surgery. You will need time to rest and recover afterward.

## **Glossary**

Benign: Not cancer.

Cervix: The lower, narrow end of the uterus at the top of the vagina.

*Chronic Pelvic Pain:* Pain in the pelvic region that lasts for more than 6 months.

Cyst: A sac or pouch filled with fluid.

*Deep Vein Thrombosis (DVT):* A condition in which a blood clot forms in veins in the leg or other areas of the body.

*Ectopic Pregnancy:* A pregnancy in a place other than the uterus, usually in one of the fallopian tubes.

*Endometriosis:* A condition in which tissue that lines the uterus is found outside of the uterus, usually on the ovaries, fallopian tubes, and other pelvic structures.

*Fibroids:* Growths that form in the muscle of the uterus. Fibroids usually are noncancerous.

*General Anesthesia:* The use of drugs that create a sleep-like state to prevent pain during surgery.

*Hysterectomy:* Surgery to remove the uterus.

*Infertility:* The inability to get pregnant after 1 year of having regular sexual intercourse without the use of birth control.

*Laparoscope:* A thin, lighted telescope that is inserted through a small incision (cut) in the abdomen to view internal organs or to perform surgery.

*Laparoscopic Surgery:* A type of surgery that uses a thin, lighted telescope and other devices inserted through small incisions (cuts) in the abdomen.

**Laparoscopy:** A surgical procedure in which a thin, lighted telescope called a laparoscope is inserted through a small incision (cut) in the abdomen. The laparoscope is used to view the pelvic organs. Other instruments can be used with it to perform surgery.

*Malignant:* A way to describe cells or tumors that are able to spread to other parts of the body.

Obstetrician-Gynecologist (Ob-Gyn): A doctor with special training and education in women's health.

*Pelvic Floor:* A muscular area that supports a woman's pelvic organs.

**Pelvic Organ Prolapse:** A condition in which a pelvic organ drops down. This condition is caused by weakening of the muscles and tissues that support the organs in the pelvis, including the vagina, uterus, and bladder.

**Tubal Sterilization:** A method of sterilization for women. The fallopian tubes are tied, banded, clipped, or sealed with electric current. Tubes also can be blocked by scar tissue from insertion of small implants. The tubes also can be removed.

*Ureters:* A pair of tubes, each leading from one of the kidneys to the bladder.

Urinary Incontinence: Uncontrolled loss of urine.

This information was designed as an educational aid to patients and sets forth current information and opinions related to women's health. It is not intended as a statement of the standard of care, nor does it comprise all proper treatments or methods of care. It is not a substitute for a treating clinician's independent professional judgment. Please check for updates at www.acog.org to ensure accuracy. Copyright November 2018 by the American College of Obstetricians and Gynecologists. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, posted on the internet, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from the publisher. This is EP061 in ACOG's Patient Education Pamphlet Series. ISSN 1074-8601 American College of Obstetricians and Gynecologists 409 12th Street, SW PO Box 96920

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