



## Sterilization by Laparoscopy

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### What is sterilization?

Sterilization is a permanent method of birth control. It is the most popular form of birth control worldwide.

### What is the sterilization procedure for women?

**Tubal sterilization** is sterilization for women. In tubal sterilization, the **fallopian tubes** are removed or cut and tied with special thread, closed shut with bands or clips, sealed with an electric current, or blocked with scar tissue formed by small implants. Tubal sterilization prevents the sperm from reaching the egg.

### How is tubal sterilization done?

Tubal sterilization can be performed in three different ways: 1) with a **minilaparotomy**, 2) with **laparoscopy**, or 3) with **hysteroscopy**.

### How effective is laparoscopic sterilization in preventing pregnancy?

Laparoscopic sterilization is highly effective. Depending on how the fallopian tubes are closed, pregnancy rates within 10 years of having the procedure range from 18 out of 1,000 women to 37 out of 1,000 women.

### Does tubal sterilization protect against sexually transmitted infections?

Tubal sterilization does not protect against **sexually transmitted infections**, including **human immunodeficiency virus (HIV)** (see FAQ009 "How to Prevent Sexually Transmitted Infections"). Women at risk of sexually transmitted diseases should use a male or female condom to protect against these infections.

### How is laparoscopic sterilization performed?

In laparoscopy, an instrument called a laparoscope is inserted through a small incision made in or near the navel. Another small incision may be made for an instrument to close off or remove the fallopian tubes. The fallopian tubes can be closed off

by bands or clips. They also can be cut and closed with special thread or sealed with an electric current. The laparoscope then is withdrawn. The incisions are closed with stitches or special tape.

### What are the risks associated with laparoscopic sterilization?

Sterilization by laparoscopy has a low risk of complications. The most common complications are those related to **general anesthesia**. There is a risk of injury to the bowel, bladder, or a major blood vessel. If an electric current is used to seal the fallopian tubes, there is a risk of burn injury to the skin or bowel. Other risks include bleeding from the incisions made in the skin and infection.

Pregnancy is rare after sterilization. If pregnancy does occur, the risk of an **ectopic pregnancy** is higher than in women who did not have sterilization.

### What are the benefits of laparoscopic sterilization?

Laparoscopy has some benefits over minilaparotomy. Recovery usually is quicker. There are fewer complications. It usually is performed as outpatient surgery, meaning that you can go home the same day. It has some benefits over **hysteroscopic sterilization** as well. Unlike hysteroscopic sterilization, laparoscopic sterilization is effective right away.

### What should I expect after having laparoscopic sterilization?

After surgery, you will be observed for a short time to be sure that there are no problems. Most women can go home 2–4 hours after the procedure. You will need someone to take you home. You may feel some discomfort or have other symptoms that last a few days:

- Dizziness
- Nausea
- Shoulder pain
- Abdominal cramps
- Gassy or bloated feeling
- Sore throat (from the breathing tube if general anesthesia was used)

Most women return to their normal routines within 1 week of surgery.

### What should I consider when choosing a sterilization method?

Deciding on a method of sterilization involves considering the following factors:

- Personal choice
- Physical factors, such as weight
- Medical history

Sometimes previous surgery, obesity, or other conditions may affect which method can be used.

### When should sterilization be avoided?

You should avoid making this choice during times of stress (such as during a divorce or after losing a pregnancy). You also should not make this choice under pressure from a partner or others. Research shows that women younger than 30 years are more likely than older women to regret having the procedure.

### What if I decide I want to become pregnant after I have laparoscopic sterilization?

If you choose to have sterilization and you change your mind after the operation, attempts to reverse it may not work. After tubal sterilization is reversed, many women still are not able to get pregnant. Also, the risk of problems, such as ectopic pregnancy, is increased.

### What are some alternatives to sterilization?

Long-acting reversible contraception, such as the **intrauterine device** or implant, last for several years. They are about as effective at preventing pregnancy as sterilization. They can be removed at any time if you want to become pregnant.

## Glossary

**Ectopic Pregnancy:** A pregnancy in which the fertilized egg begins to grow in a place other than inside the uterus, usually in one of the fallopian tubes.

**Fallopian Tubes:** Tubes through which an egg travels from the ovary to the uterus.

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

**Human Immunodeficiency Virus (HIV):** A virus that attacks certain cells of the body's immune system and causes acquired immunodeficiency syndrome (AIDS).

**Hysteroscopic Sterilization:** A sterilization procedure in which the opening of each fallopian tube is blocked with scar tissue formed by the insertion of small implants, preventing sperm from entering the fallopian tubes to fertilize an egg.

**Hysteroscopy:** A procedure in which a device called a hysteroscope is inserted through the cervix and vagina into the uterus. The hysteroscope is used to view the inside of the uterus or perform surgery.

**Intrauterine Device:** A small device that is inserted and left inside the uterus to prevent pregnancy.

**Laparoscopy:** A surgical procedure in which an instrument called the laparoscope is inserted into the pelvic cavity through a small incision. The laparoscope is used to view the pelvic organs. Other instruments can be used to perform surgery.

**Minilaparotomy:** A small abdominal incision used for a sterilization procedure in which the fallopian tubes are closed off.

**Sexually Transmitted Infections:** Infections that are spread by sexual contact, including chlamydia, gonorrhea, human papillomavirus, herpes, syphilis, and human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

**Tubal Sterilization:** A method of female sterilization in which the fallopian tubes are tied, banded, clipped, sealed with electric current, blocked by scar tissue formed by the insertion of small implants, or removed completely.

**If you have further questions, contact your obstetrician–gynecologist.**

**FAQ035:** Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

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