PROCEDURE

Tubal ligation

Tubal ligation is surgery that permanently prevents pregnancy by blocking or removing the fallopian tubes.

PURPOSE
Permanent pregnancy prevention

PROCEDURE TYPE
Therapeutic surgery, usually minimally invasive laparoscopy

WHERE IT IS DONE
Operating theatre, usually as same-day surgery

ANAESTHESIA
General; sometimes spinal or epidural after childbirth

HOW LONG IT TAKES
About 30-60 minutes for laparoscopic surgery

PREPARATION
Fasting and medication review; facility instructions take priority

RECOVERY
Same day; no driving for at least 24 hours

MAIN RISKS
Bleeding, infection, organ injury, pregnancy outside the uterus

RESULTS
Sterilization complete immediately; laboratory confirmation may take several days

Overview

Tubal ligation is a permanent form of birth control. It is sometimes called female sterilization.

The fallopian tubes carry eggs from the ovaries toward the uterus. During tubal ligation, a surgeon blocks, seals, cuts, or removes these tubes. Sperm can no longer reach an egg.

Many surgeons now remove both fallopian tubes completely. This is called a bilateral salpingectomy. It may reduce the chance of future pregnancy more than some blocking methods and may also lower the risk of certain ovarian cancers. It does not remove the ovaries.

Tubal ligation does not usually affect your hormones, menstrual periods, or the timing of menopause. If you stop hormonal birth control afterward, your periods may change because

you are no longer receiving those hormones.

The procedure does not protect against sexually transmitted infections.

Why the procedure is performed

Tubal ligation is performed when you want reliable, permanent pregnancy prevention. It may be planned as a separate operation or performed:

The procedure should be considered permanent. Reversal surgery is difficult, is not always possible, and does not guarantee pregnancy.

- Soon after a vaginal birth, through a small abdominal incision
- During a caesarean birth, using the existing incision
- During another planned abdominal or pelvic operation

Who should and should not have it

Tubal ligation may be suitable if you are certain that you do not want a future pregnancy and understand the permanent nature of the procedure. Your decision should be voluntary and made without pressure from a partner, family member, or healthcare professional.

It may not be the right choice if you are uncertain, feel rushed, or think your wishes could change. A long-acting reversible method, such as an intrauterine device or contraceptive implant, may provide highly effective birth control while preserving the option of pregnancy later.

Surgery may need to be delayed if you have an active pelvic or abdominal infection, an unstable medical condition, or a problem that makes anaesthesia temporarily unsafe. A possible current pregnancy must also be assessed.

Previous abdominal surgery, obesity, or certain medical conditions may make surgery more complex, but they do not automatically rule it out. Your surgeon can explain how your health and surgical history affect your individual risks.

How to prepare

Your treating facility's own instructions take priority over general information. Follow its directions about eating, drinking, arrival time, and medicines.

Tell the team about all medicines and supplements you use, particularly blood thinners and medicines for diabetes. Do not stop a prescribed medicine unless the treating team tells you to.

A pregnancy test may be performed before surgery. Discuss the contraception you should use before the procedure, especially if you could already be pregnant from sex earlier in your menstrual cycle.

Arrange for a responsible adult to take you home. If you receive general anaesthesia or sedating medicine, you should not drive yourself.

Bring comfortable, loose clothing. If the procedure follows childbirth or is performed during a caesarean birth, preparation and recovery instructions will be combined with your maternity care.

What happens during the procedure

For a laparoscopic tubal ligation, you are usually given general anaesthesia, which means you are unconscious and do not feel the operation.

The surgeon makes one or more small cuts near the navel and lower abdomen. Carbon dioxide gas is used to gently expand the abdomen. A laparoscope-a thin instrument with a camera-is passed through one cut.

The fallopian tubes are then closed with clips, rings, heat, or another sealing method, or they are removed completely. The instruments are withdrawn, the gas is released, and the cuts are closed.

After a vaginal birth, the uterus and tubes remain close to the navel for a short time. This allows the surgeon to reach the tubes through a small abdominal cut. During a caesarean birth, the tubes can be treated through the same incision used for the birth.

The exact method should be discussed before you consent. Ask whether your surgeon plans to block the tubes or remove them and why that approach is recommended for you.

Recovery and what to expect afterward

Mild to moderate abdominal pain is common for several days. After laparoscopy, you may also have bloating or shoulder-tip pain from the carbon dioxide gas. Pain should gradually improve. Use only the pain medicines recommended by your team.

You can usually drink and eat when you are awake and no longer nauseated. Starting with a

light meal may feel more comfortable.

Gentle walking is encouraged. Avoid heavy lifting and strenuous activity for the period given by your surgeon. Keep the wounds clean and follow instructions about bathing, dressings, and stitches.

Do not drive for at least 24 hours after general anaesthesia. Wait longer if you are taking medicines that cause drowsiness, have significant pain, or cannot comfortably perform an emergency stop. Follow local discharge instructions.

Many people return to desk-based work within several days to about a week after uncomplicated laparoscopic surgery. Physical work may require more time. Recovery after childbirth or a caesarean birth is usually longer because you are also recovering from delivery.

Ask when you can resume sex. Tubal ligation is effective immediately once the tubes have been blocked or removed, but it cannot prevent a pregnancy that began before surgery.

Risks and possible complications

Tubal ligation is surgery and has possible complications. These include:

Pregnancy after tubal ligation is uncommon but possible, including years later. If pregnancy occurs, there is a concern for ectopic pregnancy. This means the pregnancy is growing outside the uterus, often in a fallopian tube, and requires prompt assessment.

Removing the tubes may lower the risk of some ovarian cancers, but it does not remove all ovarian cancer risk. The ovaries continue to produce hormones.

- Bleeding, infection, or a reaction to anaesthesia
- Injury to the bowel, bladder, blood vessels, or other nearby structures
- Blood clots or problems with wound healing
- Ongoing pelvic or abdominal pain
- Failure of the procedure, resulting in pregnancy

Results and follow up

The contraceptive effect is immediate after the tubes are blocked or removed. Unlike some older sterilization techniques performed through the cervix, surgical tubal ligation does not usually require a later test to confirm blockage.

If the tubes were removed, they may be examined in a laboratory. Those results may take

several days, but they usually do not change the immediate contraceptive result.

Your team may arrange a routine wound check or postoperative appointment. Some facilities instead ask you to contact them only if you have concerns. Follow the discharge plan you receive.

Your menstrual cycle should continue. If your period is late or you have symptoms of pregnancy at any time after the procedure, take a pregnancy test and contact a healthcare professional.

Alternatives

Tubal ligation is not the only highly effective option.

If you later want to become pregnant, tubal reversal may not be possible or successful. In vitro fertilization, or IVF, can bypass the tubes but involves fertility treatment, cost, and no guarantee of pregnancy.

- Intrauterine device: A hormonal or copper device placed in the uterus. It is long-lasting and reversible but requires insertion and eventual replacement or removal.
- Contraceptive implant: A small rod placed under the skin of the arm. It is highly effective and reversible but can cause changes in bleeding.
- Vasectomy: Permanent contraception for a partner who produces sperm. It is generally simpler than tubal surgery, but it is not immediately effective; semen testing must confirm success.
- Pills, injections, patches, or vaginal rings: These avoid abdominal surgery but require repeat doses, appointments, or regular use.
- Condoms: These can reduce the risk of sexually transmitted infections, but they are less reliable for pregnancy prevention with typical use.
- No contraception: This avoids treatment and side effects but accepts the possibility of pregnancy.

When to call your healthcare team

Contact your surgical team promptly for a fever, increasing wound redness, pus or bad-smelling drainage, persistent vomiting, difficulty urinating, worsening pain, or bleeding that concerns you. These concerns may need assessment but are not always emergencies.

Seek urgent medical care for a positive pregnancy test, missed period with pelvic pain, or

unexpected vaginal bleeding after tubal ligation.

Call emergency services for severe or rapidly worsening abdominal pain, fainting, severe dizziness, chest pain, trouble breathing, or pregnancy symptoms with one-sided pain or shoulder-tip pain. These can be signs of a serious complication or ectopic pregnancy.

Common questions

Will I be asleep?

Most laparoscopic procedures use general anaesthesia, so you are fully unconscious. A procedure performed during or soon after childbirth may use an existing spinal or epidural anaesthetic.

Can I drive home?

No. Arrange for someone to take you home. Do not drive for at least 24 hours after general anaesthesia and longer if pain or medication affects you.

How painful is tubal ligation?

You should not feel the operation under anaesthesia. Abdominal soreness, cramping, bloating, and shoulder-tip pain can occur afterward and usually improve over several days.

When will I know it worked?

The procedure is considered effective as soon as the tubes are blocked or removed. Laboratory examination of removed tubes may take several days.

Can tubal ligation be reversed?

Sometimes, but reversal is major surgery and does not guarantee pregnancy. Complete removal of the tubes cannot be reversed. IVF may still be an option.

Will it stop my periods?

No. Your ovaries and uterus remain, so menstrual cycles usually continue. Periods may seem different if you stop hormonal contraception.

Sources

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