



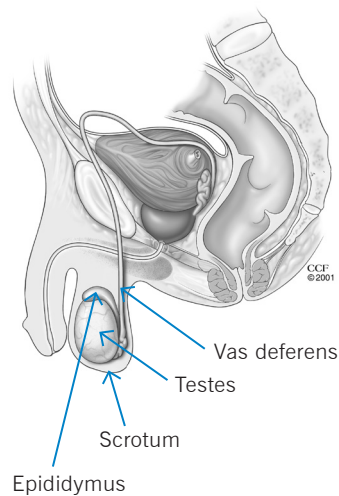
Cleveland Clinic Glickman Urological & Kidney Institute

Guide to Vasectomy

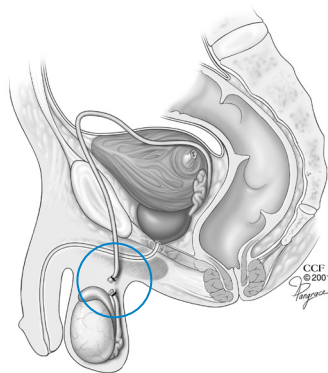


Vasectomy is a simple, safe operation that involves blocking the tubes called vas deferens that transport sperm. The procedure is intended to make a man permanently sterile, or unable to father a child. More than 50 million men have had vasectomies.

Before



After



The Benefits of Vasectomy

Vasectomy offers many advantages as a method of birth control — the main one being its effectiveness. Like female sterilization, vasectomy is a one-time procedure that provides permanent contraception. Compared to female sterilization, however, vasectomy is simpler, even more effective, can be performed on an outpatient basis, has fewer complications and is much less expensive. Annual pregnancy rates with typical use of various forms of birth control are shown below.

| | |
|--|--------|
| Female hormonal injection (DepoProvera)..... | 3% |
| Birth control pill | 8% |
| Diaphragm..... | 16% |
| Cervical cap..... | 16-32% |
| Condom | 15% |
| Rhythm (periodic monthly abstinence) | 12-20% |
| Withdrawal (prior to ejaculation) | 27% |
| Spermicidal creams..... | 28% |
| Female tubal ligation | <1% |
| Vasectomy | <1% |

Source: Statistics current as of 2009 (adapted from *Contraceptive Technology, 19th edition, 2007*)

What does the procedure involve?

Vasectomy is performed under local anesthesia in an outpatient procedure room. The surgeon feels for the two sperm-carrying tubes, or vas deferens, under the skin of the scrotum and holds them in place (one at a time). Injection of a local anesthetic using either a tiny needle or other injector completely numbs the surgical site. The anesthetic works immediately. The surgeon makes a small opening in the skin so the vas deferens can be grasped, cut and sealed off. There is little discomfort, though some men feel a slight “tugging” sensation. This approach causes very little bleeding. Stitches may or may not be needed to close the incision. Generally, the procedure takes 15 to 30 minutes.

What happens to sperm after a vasectomy?

The testes continue to make sperm, but the sperm cells die and are absorbed by the body. This is the same way the body handles other types of cells that die and are replaced on a daily basis.

Can I discontinue other birth control methods right away?

No. Sperm can remain in the vas deferens beyond the blockage site for weeks or even months after vasectomy. You will not be considered sterile until post-surgical testing (usually done 12 weeks after your operation) shows that no live sperm remain. This test must be repeated monthly until clear. Until then, you must continue to use other birth control to prevent pregnancy.

You will receive a letter from your doctor's office confirming your sterility. Only then is it safe to discontinue birth control.

What are the risks of vasectomy?

Although complications such as inflammation, bleeding or infection may occur, they are relatively uncommon and not serious. Minor risks include:

- › Sperm granuloma. A hard, sometimes painful lump about the size of a pea may form as a result of sperm leaking from the cut vas deferens. The lump is not dangerous and almost always goes away in time. Typically, scrotal support and mild pain relievers help ease symptoms.
- › Congestion. A feeling of pressure caused by sperm in the testes, epididymis and lower vas deferens may cause discomfort for two to 12 weeks after vasectomy. Like granuloma, congestion usually resolves over time.
- › Pain. Any surgical procedure can affect nerves and, rarely, there can be residual "phantom" pain. The testicles are sensitive organs, so such pain is common in men whether they have had vasectomy or not. It is not clear whether vasectomy increases this risk.

Will I experience any unwanted side effects?

Vasectomy does not affect production or release of testosterone, the male hormone responsible for a man's sex drive, facial hair, deep voice and other masculine traits. The operation also has no effect on sexuality. Erections, climaxes and the amount of ejaculate remain the same; the only difference is that semen will no longer contain sperm. Some men who have undergone this procedure say that sex is more spontaneous and enjoyable because they are freed from concerns about contraception.

Is a vasectomy 100 percent effective?

Other than total abstinence, no method of birth control is 100 percent effective. In rare cases, it is possible for sperm to find its way across the gap between the two blocked ends of the vas deferens. Called recanalization, this generally occurs within the first few months following vasectomy. However, the failure rate of vasectomy is very low, as shown in the previous table. Vasectomy has a long track record as a safe and effective method of contraception. If testing shows that live sperm continue to appear in semen samples, or if sperm are discovered after a period of time, a repeat vasectomy will be necessary. Research shows that this only happens about once in every 2,000 cases, a failure rate far less than any other form of birth control.

Can I have it reversed later if I choose?

Vasectomy is considered permanent sterilization so you'll want to carefully consider whether the procedure is right for you. Men who are married or in a committed relationship should discuss this issue with their partners. If you're unsure whether you may want to father a child in the future, it's best to hold off having the procedure. Vasectomy reversal can be done but is generally not covered by insurance and may not be successful.

Does vasectomy pose long-term health risks?

Many studies have examined the long-term health effects of vasectomy. The evidence suggests that no significant risks exist. Men who have had a vasectomy are no more likely than other men to develop cancer, heart disease or other health problems.

In the early 1990s, a few reports suggested that vasectomized men might have a slightly higher risk of prostate cancer. Multiple studies ensued in several countries, including the United States, to assess this risk. All concluded the same thing — there is no evidence that vasectomy increases the risk of prostate cancer.

In 1993, a panel assembled by the National Institutes of Health, the Association for Voluntary Surgical Contraception and the National Cancer Institute reaffirmed the conclusion of most medical experts that vasectomy is a safe and effective means of permanent birth control. The panel advised that physicians continue to offer vasectomy, and that all men, vasectomized or not, receive the same regular screenings for prostate cancer and other illnesses.

More recently, the American Urological Association's Vasectomy Guideline Panel criticized the validity of a 2014 study published in the *Journal of Clinical Oncology* that reported a small association between vasectomy and prostate cancer. The panel's comprehensive analysis of many previous studies also found that vasectomy is not a risk factor for prostate cancer.

Preparation

To determine if you are eligible for vasectomy, we will review your health history and you will receive a brief physical examination. Please be sure to tell us if any of the following apply to you:

- › History of excessive bleeding or blood disorders
- › Allergy or sensitivity to local anesthetics, such as the “caine” drugs or antibiotics
- › Regular use of aspirin or aspirin-containing medicines for a week before vasectomy
- › History of injury or prior surgery (especially vasectomy or vasectomy reversal) on the genitalia
- › History of recent or repeat urinary tract or male genitalia infections

Before surgery

- › You will be asked to sign a request for sterilization. The form will state that you understand vasectomy, its potential risks and that it is not guaranteed to result in permanent sterility. Prior to signing this form, be sure that you are knowledgeable about and comfortable with your decision. It is important that you resolve any questions or concerns you may have. Remember that vasectomy is an elective procedure, so you should not proceed with it until you are convinced it is the right choice for you.
- › Do not take any products known as “blood thinners” that decrease your blood's ability to clot. Some examples of these are aspirin; nonsteroidal anti-inflammatory drugs or NSAIDs (ibuprofen, naproxen, Naprosyn, Advil, Motrin, Aleve); warfarin (Coumadin); clopidogrel (Plavix); apixaban (Eliquis), and others. Please discuss with your doctor any prescription medications you are taking. Do not use over-the-counter products for seven days before your surgery.
- › The night before or the morning of vasectomy, shave the hair from the entire scrotum. Remove the hair all the way to the top of the penis, including any pubic hair that seems to contact the scrotum. Using a single-blade disposable razor and soap and water in the shower is the best choice. Failure to adequately remove this hair may increase the risk of infection.
- › To reduce the risk of infection, thoroughly wash the scrotum and groins the day before and the morning of surgery.
- › Bring a clean athletic supporter or snug pair of jockey shorts with you.
- › A light meal or liquid is preferable to heavy food before vasectomy. Do not fast.
- › Most men are able to drive themselves home after vasectomy, although it may be wise to have a ride available if you need it. If you receive a prescription for Valium, you must have someone drive you to and from the procedure.

What to expect after vasectomy

Pain/Bruising

Mild discomfort, bruising and swelling are common after surgery. You may treat mild discomfort with acetaminophen (for example, Tylenol) every four hours. Ice packs or a bag of frozen vegetables placed over the scrotal supporter and dressing may also provide relief. Regular use of ice packs for the first 36 hours helps minimize swelling.

Dressing

The dressing covering the incision should be changed when stained or soiled. Small sterile gauze squares are available at any drugstore. The dressing can be removed when it is dry or stain-free, usually within a day or so. A small amount of oozing is to be expected; it's better that this fluid not build up internally. If there is bleeding, you should temporarily pinch or otherwise compress the skin until the bleeding stops, just as you would do if you cut yourself shaving.

Bathing

You can bathe or shower the day after vasectomy. To dry the scrotum, use a gentle patting motion.

Skin Separation

Sometimes the skin at the incision site will separate due to tissue fluid, blood or body fluids. You can pinch the edges together with sterile gauze and your fingers. This will bring the skin together and allow it to heal.

Return to activity

Most men recover completely in less than a week. You should take the day after surgery off work. Everyday activities can be resumed two days after surgery unless the activities are unusually vigorous.

You can resume sexual activity a week after vasectomy, but take precautions against pregnancy until sperm counts show that your semen is free of sperm. Generally, semen is checked for sperm 8-12 weeks after the vasectomy.

Post-vasectomy symptoms are not unusual and should subside within 72 hours of surgery. However, if you experience an unusual amount of pain, large swelling of the scrotum, continued bleeding or fever, call your physician. If you cannot reach your physician, call 216.444.2200 and ask the operator for the urology resident physician on-call.

Information/Appointments

For more information about vasectomy or to make an appointment at Cleveland Clinic, please call [216.444.5600](tel:216.444.5600).

Please visit clevelandclinic.com/vasectomy for locations and providers.

This information is for educational purposes only and should not be relied upon as medical advice. It has not been designed to replace the independent judgment of a physician about the appropriateness or risks of a procedure for a given patient.



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