EZ (NO -SCALPEL , NO -NEEDLE) VASECTOMY®

Vasectomy is a method of birth control chosen by more than 500,000 men each year in the United States. It is a simple, safe procedure that is more than 99% effective in preventing unwanted pregnancy. Vasectomy does not affect one's manliness in any way because it has no effect on the male hormones produced by the testes. Sex drive, the ability to attain and maintain erections, and the sensation of orgasm usually remain the same following vasectomy. Since the procedure only prevents sperm from entering the semen (ejaculate) and since sperm comprise only 2 - 5% of the semen volume, most men notice no change in the male reproductive fluids. Vasectomy is performed in the office under local anesthesia and most patients agree that it hurts about as much as having a blood sample drawn from the arm, though many say not at all.

We use a spray applicator (MadaJet) to deliver a stream of anesthetic so fine that it numbs the skin and penetrates to a depth of about 3/16 of an inch, enough to surround and anesthetize each vas tube in turn as it is lifted into position beneath the skin. After cleansing and draping the scrotum in a sterile field as the anesthetic takes effect, one vas tube is manipulated back into position just underneath the area of numb skin. It is held against the skin with a special fixation forceps, then drawn through a small opening in the skin, divided, and the upper cut end cauterized so that it will seal by scarring. A small titanium clip is used to close the vas sheath around the lower end so that the ends are separated by a tissue layer and less likely to grow back together. (No, you won’t set off airport alarms and your scrotum won’t explode in an MRI machine.) The vas ends are released back into the scrotum and the other vas is brought out thru the same opening and treated similarly. No sutures are required; the small opening will seal within a few days. The patient is asked to minimize activity for 48 hours. He may return to work 2-3 days after the procedure and normal sexual activity 7 days after the vasectomy.

Because reversal attempts are not always successful, vasectomy should be considered a permanent and irreversible procedure.

INSTRUCTIONS BEFORE VASECTOMY

1. Understand the "Instructions Following Vasectomy" so that you know what to expect.
2. Please shave the front wall of scrotum and underside of the penis, and then take a good shower before you leave home for vasectomy.
3. Use no powder or deodorant in the genital area on the day of your procedure.
4. Don’t bring an athletic supporter, we provide you a free athletic supporter on the day of the procedure.
5. You are able to drive yourself although a flat tire or fender bender could lead to complications.
6. Do not take any aspirin-containing medication for five days before the procedure.
7. Eat before your procedure, a normal breakfast or lunch. Nervous men who do not eat beforehand are more likely to become lightheaded during or after their vasectomies.
INSTRUCTIONS FOLLOWING VASECTOMY

1. Spend a quiet evening at home, reclining in bed or on the sofa. Minimize activity.
2. You may take acetaminophen (Tylenol® or generic) or ibuprofen (Motrin®, Nuprin®, Advil®, or generic) for any discomfort. Avoid aspirin for 2 days after the vasectomy.
3. No need for ice packs
4. You may remove the scrotal support and take a daily shower starting the morning after the procedure. Replace the scrotal support and wear it whenever you are up and around for the next 2 days, during sports for the next 7 days.
5. On the day after the procedure, you may walk and drive as much as you like, but no sports, yard work, swimming, or heavy lifting. Men with non-strenuous jobs may work the next day.
6. Two days after the procedure, you may return to rather strenuous work and regular activities wearing your scrotal support. Wait 3 days for aggressive sports like basketball and tennis, and wear the scrotal support during sports for a week. If you are a weight lifter or runner, would may resume your workouts 2 days after the vasectomy, but on the first day back, do half of your usual workout, that is, half your usual reps with half your usual weight, and half your usual distance at half your usual speed. If you feel fine that night, resume your usual workout 3 days after the vasectomy. If a half-workout causes soreness, give it more time.
7. You may have sex 7 days after the procedure. It is uncommon but normal to have some blood in the semen for the first few ejaculations.
8. Since no large incisions made, a follow-up visit is not required. If you have any undue discomfort or concerns, you should call our office at 952-922-2151 at any time after your vasectomy. During after-hours, our answer machine will give you Dr. Shu’s cell phone number for any urgent needs.
9. It is normal to have some discoloration of the skin (black and blue) around the puncture site a day or two after the vasectomy. Some men will develop considerable discoloration of the scrotum about 4 days after the vasectomy. Blood from the deep vasectomy site comes to the surface as a purplish-blue mark, gets darker and spreads out like an oil slick, then gradually dissipates.
10. Some men (about one in 20) will develop swelling and discomfort on one side, sometimes on both sides, starting anytime from 3 days to 3 months following vasectomy. This usually represents an exaggerated form of the normal inflammatory response necessary for sperm resorption and recycling. It is effectively managed with a 5-7 day course of ibuprofen 600 mg 3 times per day.
11. Twelve weeks after your vasectomy, have your semen tested to be sure that it no longer contains sperm and that it is thereby safe to stop other forms of contraception:
   1. If you live far away from our Edina office, or your vasectomy is performed in the Shoreview office, we will provide you with a mailer so you can send us a semen sample by mail, at least twelve (12) weeks and 20 ejaculations after your vasectomy (number of ejaculations and number of weeks are both important). The container provided contains a bit of antibiotic so that the sample does not become overgrown with bacteria. We will call you a few days later for the results.
   2. If you live or work close to the Edina office, we will provide you with a container and ask you use it to bring a semen sample to the Edina office 12 weeks and 20 ejaculations after your vasectomy. (Number of ejaculations and time are both important, so a semen sample brought
in before 12 weeks is less likely to be free of sperm.) If you lose the container that we provide, you may use a small container with a lid, such as a pill bottle, baby food jar, 35 mm film canister, etc. Please do not bring the sample in a condom or baggie as we will be unable to retrieve an adequate specimen and you will be asked to return with another sample in a container with a lid. The sample should be produced on the day of examination, but can be 3 or 4 hours old. You may bring the sample anytime during regular office hours (8:00 - 5:00). If sperm are seen, you will be asked to continue other means of birth control and to return with a second specimen in 3 weeks. After twelve weeks and 20 ejaculations (both), 98% of men will have no sperm in their semen. Two percent will have to repeat the test at least once.

THE POSSIBLE COMPLICATIONS

Vasectomy provides the most effective, permanent means of surgical contraception. When compared with other contraceptives, it has one of the lowest incidences of side effects, considering that pregnancy is a side effect of alternative contraceptive failure.

- **No deaths** have been attributed to vasectomy in developed countries. Large-scale studies show that the overall incidence of complications is less than 5 per 100 vasectomies performed.

- **Minor side effects** immediately following vasectomy may include discomfort, swelling and/or bruising of the scrotal skin, all of which usually disappear without treatment. Some men (about 1 in 20) will experience swelling and a low-grade ache in one or both testes anywhere from two weeks to six months after the procedure. This is probably due to an exaggerated form of the body’s natural response to the obstruction caused by the vasectomy. It usually responds nicely to an anti-inflammatory drug (such as ibuprofen) 400-600 mg 3 times per day and almost never lasts for more than a week or two but for rare patients, fewer than 1 in 100, swelling and discomfort will occur more than once and/or will be severe enough to require prescription pain medications, stronger anti-inflammatory drugs, and one or more days off from work.

- **Early complications** such as hemorrhage and infection can occasionally occur after any surgery. Based on large-scale studies, the overall incidence of either hematoma (a blood clot in the scrotum) or infection is less than 2% of the vasectomies performed.

- **Long term**, vasectomy can lead to the following conditions:
  1. A **sperm granuloma** is a pea sized tender mass which results when the body reacts to and walls off sperm which may leak from the lower (testicular) end of the cut vas. Occasionally this will be tender enough that removal is required, but most patients do not experience discomfort unless they are actually squeezing on the small mass. A sperm granuloma may enhance the likelihood of reversal success.
  2. A few (perhaps 5%) of patients will experience **periodic tenderness** of the epididymis, the tube behind the testis in which sperm are resorbed by white blood cells after vasectomy. Since this resorption process is a form of inflammation, it nearly always responds to a short course (3-7 days) of an over-the-counter anti-inflammatory drug such as ibuprofen. Post-vasectomy pain syndrome is defined as testicular pain (on one or both sides) for greater than 3 months after having a vasectomy, severe enough to interfere with daily activities and causing a patient to seek medical attention.
Because pain is so subjective, reported rates vary but compiled data would suggest that this is a significant problem for 1-2% of vasectomy patients. Vasectomy reversal, removal of the epididymis, or a special procedure called neurolysis may be required to alleviate the discomfort.

3. **Recanalization** is the re-establishment of sperm flow from the testis up to the rest of the reproductive tract by virtue of the cut ends of the vas growing back together after vasectomy. Most early recanalizations occur during the healing process and are detected at the time of follow-up.

4. Semen checks (live sperm are seen). It obviously requires that the procedure be repeated and there is no charge for the second procedure. Late recanalization, return of live sperm to the semen at some time after the semen has been confirmed to be sperm-free by microscopic examination, is also very rare. From the reports in the literature, odds being less than one in 4000, a rate of failure much lower than with any other form of contraception. My office does not require another semen check after the absence of sperm has been confirmed, but patients are encouraged to return with or mail a second sample 4 months after vasectomy to achieve an added index of confidence; and we will examine semen at no charge on any vasectomy patient throughout his lifetime as often as he desires.

5. **Antisperm antibodies** do appear in the blood of about half of the patients who undergo vasectomy and patients who develop antibodies have a lower chance of causing a pregnancy even when a successful vasectomy reversal allows sperm to re-enter the ejaculate. These antibodies have no influence on health status otherwise.

6. The February 17, 1993 issue of the Journal Of The American Medical Association contained 2 studies (by the same research group) of suggesting that vasectomy was associated with a small increased risk of prostate cancer in their study groups (almost 30,000 patients in 1 study and almost 40,000 patients in the other study). Because the question was initially raised by 2 studies back in 1990, the World Health Organization convened a 1991 meeting of 23 international experts to review all research regarding vasectomy and prostate cancer. They concluded that there was no plausible biologic mechanism for a relationship between vasectomy and prostate cancer. Some medical researchers interpreted the small increased risk noted in the 1993 studies as a weak association that may be due to chance or bias. Many studies published since then show no relationship between vasectomy and the risk of prostate cancer. Because the question of a relationship has been raised, however, the American Urologic Association recommends that men who have had vasectomy and are over 40 have an annual rectal exam and prostate cancer screening blood test (PSA). This is the same recommendation made by the AUA for all men of age 50-70.
ALTERNATIVES TO VASECTOMY

1. **Barrier methods.** You could wear a condom, your partner could use a diaphragm, or you could use both together.

2. **Spermicides.** There are foams and creams that can be placed into the vagina before intercourse to kill sperm before they can fertilize your partner’s eggs. Spermicides can be used alone or in combination with barrier methods.

3. **Hormonal methods.** Your partner may use birth control pills, shots, patches, or implants to prevent the release of eggs from the ovaries or the implantation of fertilized eggs into the uterus (womb). Emergency Contraception (EC, or the “morning after” pill) will prevent pregnancy if taken within 72 hours of intercourse during which no contraception was used.

4. **Intrauterine device (IUD).** Your partner may have a small device placed into her uterus to decrease the likelihood of fertilization (sperm and egg coming together) and to prevent implantation of fertilized eggs into the uterus.

All of these alternatives are less effective than vasectomy, but they are reversible. You should be familiar with them before proceeding with vasectomy. Please ask us if you would like more information, and feel free to postpone your vasectomy if you need more time to evaluate information about alternatives. There is no form of fertility control except abstinence that is free of potential complications. Vasectomy candidates must weigh the risks of vasectomy against the risks (for their partners) of alternative means of contraception as well as the risks associated with unplanned pregnancy and either induced abortion or childbirth. Vasectomy provides a means of permanent birth control with a minimum likelihood of complications and maximum chances of effectiveness and safety.

**FEES**

Patients who pay cash for vasectomies are given a discounted rate of $690.00 for the procedure. This is a discounted rate for patients who pay with cash, check, or charge card. When we apply for payment to insurance companies, a higher standard rate structure is used, and insurance companies pay the contracted rate. The initial consultation is not required. We charge $151 if you need a consultation prior to vasectomy.