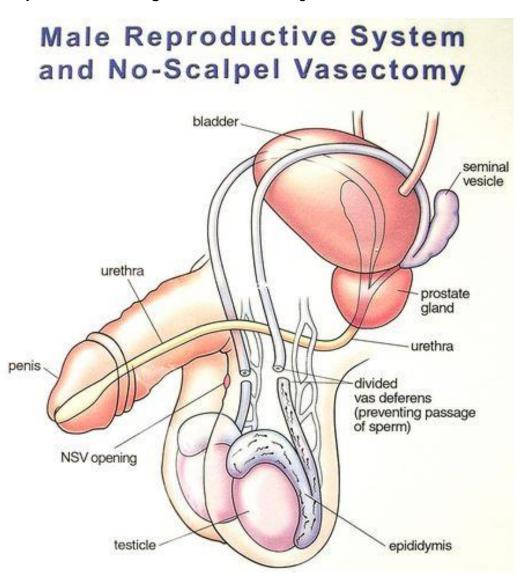


VASECTOMY

Vasectomy

Vasectomy was developed as a means of contraception in the early 20th century. Roughly 500,000 men choose this as a form of contraception yearly. Vasectomy is a dependable method of **birth control** for men who think they will never want **any** or **any more** children. It is a **30-minute procedure** performed in a doctor's office with a local anesthetic. The objective is to **prevent sperm from entering the semen**. See diagram bellow.



Dr Webster has been trained in No Needle, No Scalpel Vasectomy.

Dr Webster uses the **no-needle no-scalpel technique**, exposing each vas in turn through a **tiny opening** in the front scrotal wall under **local anesthesia**. Since the opening is so small, it is easy to apply anesthesia **without** the use of **needles**. A spray applicator (MadaJet®) delivers a stream of anesthetic so fine that it penetrates the skin and diffuses 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. Most patients require no more anesthetic than this for completion of the procedure itself without pain. Some patients do require injection of more anesthetic, but since the skin and vas are already partially numb, injection of more anesthetic with a fine needle rarely causes more than the slightest sensation. The tiny opening in the dime-sized area of numb skin is made with a pointy hemostat: one tip makes a pinpoint opening, then the two tips are used to spread and enlarge the opening to about 1/4 of an inch. Since blood vessels in the skin are spread apart rather than cut, bleeding is less than when a scalpel is used, no stitches are required, and the opening is usually sealed closed (often barely visible) by the next day.

Once each vas tube is lifted through the small skin opening, it is divided under direct vision and one end is cauterized. Nothing is removed; the ends of the divided vas are placed out of alignment and kept from rejoining by applying a tiny clip to the sheath surrounding the vas so that one end stays inside the sheath, the other outside. While extremely effective (failure rate less than 1 in 2000), the technique provides for less scarring than when sutures are used. Procedure time is about 30 minutes. Most men say it hurts less than having a blood sample drawn. A **scrotal support** (jockstrap) is applied and should be worn overnight and reapplied. after a next-morning shower, when up and around for the next 2 days. Men are advised to recline on the evening of the vasectomy, light activity the next day, with most men resuming normal activity on the second day after the procedure. After vasectomy about half of men will take non-prescription pain pills (Tylenol or ibuprofen), often just to prevent expected discomfort; the other half don't take any pain pills. About 1 in 1000 men will have enough discomfort to request a prescription pain medication. Semen samples will need to be sent to the office (12) weeks after the procedure to see if all stored sperm have been passed. Until you have received a negative semen analysis you must use a backup form of contraception. Ninety-eight percent of men are sperm-free after 12 weeks and 20 ejaculations, some sooner, and a few men will not be sperm-free for 5 or 6 months.

Sperm Movement Before Vasectomy

Sperm are made in the testes. From each testis, sperm move through a long curled-up tube behind the testis (the epididymis) where they mature. From there, they swim up a foot-long tube (the vas) which guides them up to the channel (urethra) through which men urinate and ejaculate. Just before entering the urethra, the left and right vas tubes are enlarged, and it is here, behind the bladder, where many sperm are stored between ejaculations. The easiest place to access the vas tubes is just above the testes where the vas tubes are just beneath the thin scrotal skin, easy to feel and very mobile.

After Vasectomy

The portions of the vas tubes within the pelvis still contain live sperm until they are all released. About 98% of men are sperm-free after 20 ejaculations and 12 weeks. In 5% of men, the semen may still contain some sperm (usually few in number and not active) for months, so it is **important to have a semen sample checked** and to use other forms of birth control until it is confirmed by microscopic examination that the semen is sperm-free.

Men usually notice:

- No change in the semen
- No change in sex drive (in fact a 2014 study showed that vasectomy positively effects sexual relationship of couples)
- No change in climax sensation
- No change in the testes or scrotum
- No change in erections

Risks

Bleeding can occur during or after vasectomy but is less common with the no needle no scalpel vasectomy used by Dr Webster (around 1 percent opposed to 11 percent with standard vasectomy). If this occurs within the scrotum, drainage of a scrotal hematoma (blood clot) in a hospital operating room could be necessary. Smaller hematomas do not require surgical drainage, but tender swelling can last for 2 to 4 weeks. Both large and small hematomas are uncommon. If the scrotal skin bleeds at the vasectomy access site, the scrotum can become discolored (black and blue) for about a week.

Infection is also a rare complication. In standard vasectomy the infection rate is between one and four percent. With the no scalpel no needle technique used by Dr Webster the infection rate is 0.2 %. Severe cases of infection may require antibiotics or even hospitalization.

Sperm granuloma is a pea-sized (sometimes tender) lump on the vas tube at the vasectomy site, almost never requiring treatment. Sperm granuloma may increase the likelihood of success with vasectomy reversal. Periodic tenderness usually responds to an anti-inflammatory medication like ibuprofen. In rare cases removal of this granuloma can be performed in an office setting.

Congestion, tender buildup of sperm and white blood cells upstream from or at the vasectomy site, can occur any time after vasectomy, but usually goes away with use of an anti-inflammatory drug such as aspirin or ibuprofen. About one in 2000 patients will experience **chronic post-vasectomy discomfort** (PVPS or Post-Vasectomy Pain Syndrome) severe enough that he will seek vasectomy reversal or neurolysis (division of the sensory nerves coming from the testes). A larger percentage (as high as 5%) may have milder forms of chronic pain that can affect quality of life but not severely enough to seek vasectomy reversal.

Recanalization is the development of a channel for sperm flow between the two cut ends of the vas. If this happens during the healing process (**early**), the semen never becomes sperm-free until the vasectomy is repeated. If recanalization happens **late** (months or years after a man's semen has been examined and declared sperm-free), an unplanned pregnancy could result; but the odds of this occurring is far less after vasectomy than the odds of pregnancy with any other form of birth control including birth control pills and tubal ligation (female sterilization).

You may regret it: Vasectomy is reversable in up to 80% or cases but should be considered a permanent form of birth control. If you are young, your partner is young, or you change partners there is a chance you may want children in the future. Men should consider not having a vasectomy or banking sperm if they think there is **any chance**, they will want children in the future. See sperm storage options bellow.

Sperm storage options:

ReproTech

ReproTech, Ltd. (RTL) supports a network of top fertility centers specializing in the treatment of infertility. Following cryopreservation at one of the centers, specimens are shipped to ReproTech for long-term cryostorage at one of its **four (4) facilities**. To locate the nearest member of the **Fertility Preservation Network**, go to www.reprotech.com or call 888-953-9669. If you are unable to travel to one of the members of the Fertility Preservation Network, ReproTech also offers a **sperm banking by mail kit**, OverNite MaleTM Kit which may be used to send your specimen by FedEx to their processing lab. ReproTech provides **financial assistance** to qualifying patients through its Verna's Purse www.vernaspurse.org.

Xytex Corporation

Xytex Corporation (<u>www.xytex.com</u>) can mail a patient a Cryokit® for sperm storage by mail, so the candidate can carry out the whole process in the privacy of his own home.

- 1. Call Xytex at 1-800-353-5748 and request a **cryokit**.
- 2. After receiving a cryokit by mail and over a period of one week, collect **3 semen samples.** For each collection, you are provided a storage tube for 95% of the semen and a drop tube for 5% of the semen.
- 3. After collection of the third specimen, mail the cryokit back to Xytex.
- 4. The drop tube specimen will be tested by Xytex to determine whether the remainder of the semen is worth storing, i.e., likely to cause a pregnancy when used. Xytex will contact you by phone with the semen test results.
- 5. If favorable, you will have to decide whether to continue storage and for how many years. If unfavorable, you can still store, but with less expectation of success if and when the semen is used.

CryoChoice

CryoChoice is another option. The company offers a cost-effective home kit for privately banking sperm. All clients who store with CryoChoice commit to a minimum of three years' **storage**. To learn more, visit www.cryochoice.com or call **800-619-7869**.

Special Message for Young men considering vasectomy:

If you are less than 30 years old and you have had fewer than 2 children, please consider the following points before having a vasectomy. **Vasectomy should be considered a permanent and non-reversible procedure** because vasectomy reversals are not always successful. So before having a vasectomy, know all the other options. There is a nice review of these options on the planned parenthood website. https://www.plannedparenthood.org/learn/birth-control

- 1. You may regret it. Men who have vasectomies when they are in their 20's, especially if they have had fewer than two children, may be the ones most likely to seek vasectomy reversal at a later date, often regretting their vasectomy decisions if their reversals are not successful.
- 2. **You may change**. Many men who think they will never want children when they are in their early 20's are delighted with fatherhood when they are in their 30's. You may be totally convinced now that you will never want children, but people change and you may have a much different outlook 10 years from now.
- 3. **Women change**. Similarly, women who have no desire for children when they are in their early 20's may have a much stronger desire when they are in their 30's.
- 4. **Relationships end**. Since more than 50% of American marriages end in divorce, you may not be with the same partner ten years from now and a new partner may have a much stronger desire for children than your present partner does.
- 5. Young men should consider sperm storage (see above).
- 6. Have you discussed your decision with your parents? If not, consider this: You're an adult, yes, but they helped you get there. How would you feel if your son came home one day and said that he had had a vasectomy? That he had done something to limit his future potential (to be a father) and to limit your own potential (to be a grandparent).

INSTRUCTIONS BEFORE VASECTOMY

- 1. Please **shave** the underside of the penis and the front wall of the scrotum, preferably before the day of the procedure. A bit of alcohol is used to clean the skin before use of the MadaJet® and it can sting slightly right after a fresh shave if the skin is chafed.
- 2. Use **no powder or deodorant** in the genital area on the day of your procedure.
- 3. No need to bring an athletic supporter. One will be provided.
- 4. Be prepared to sign the operative **consent** sheet provided to you.
- 5. If possible, arrange to have someone drive you home. A flat tire or fender bender could lead to complications, and some men who leave the office feeling great will experience delayed lightheadedness. If you must drive yourself, drive in the right-hand lane so that you can pull over if you begin to feel lightheaded.
- 6. Plan to do nothing but recline at home on the evening of the vasectomy.
- 7. **Do not take any aspirin-**containing medication for five days **before the procedure**.
- 8. Check with your insurance company regarding payment for vasectomy.
- 9. **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. **Some** men have **no pain at all** after vasectomy. Many have mild discomfort that does not require pain pills. Sometimes the **discomfort** is **in the groin or abdomen**.
- 2. Avoid aspirin for 2 days after the vasectomy. You may take acetaminophen (Tylenol or generic) if you have any discomfort. Ibuprofen (Motrin, Advil or generic) and naproxen (Aleve) are both pain medications and anti-inflammatory drugs. For the first few days after a procedure, inflammation may be a normal component of the healing process, so Tylenol is preferred. Pain beyond 3 days, especially if accompanied by some swelling of the vasectomy sites above the testes, may signify excessive inflammation and then ibuprofen and naproxen are good choices. Some men will have more discomfort or tenderness 3-5 days after the vasectomy than they do for the first few days after their vasectomies. That's because the body goes through a series of steps in responding to the vasectomy, and sometimes the later steps are more noticeable than the earlier steps. Usually no reason for concern.
- 3. 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 and during sports for the next 7 days.
- 4. 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. If your job is sedentary (office work or supervisor), you may return to work.
- 5. Two days after the procedure, you may return to more strenuous work and regular activities wearing your scrotal support. When pain is gone and tenderness is minimal, you may return to the gym or to running, but on the first day back, do half of your usual workout: half the weight, half the reps, half the speed, half the distance, etc. If pain does not return, you may do your regular workout the next day. You may also **swim** in fresh or salt water two days after the vasectomy.
- 6. The American Urological Association Vasectomy Guidelines recommend that men wait a week to ejaculate. Blood in the semen within the first month or two after the vasectomy occurs in some men, but it is no reason for concern.
- 7. Since no incision is made, no follow up visit is required. Please call with any concerns after your vasectomy.
- 8. 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.
- 9. 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.
- 10. **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. This is done at Wildwood clinic.

