# THE CONRAD PEARSON CLINIC UROLOGY CENTER OF THE SOUTH

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## Vasectomy

By Robert S. Hollabaugh, Jr. MD

## What is the best birth control?

Effective birth control is an issue that every couple considers throughout the course of their relationship. A variety of options exist, and at various phases of a relationship, one method may be preferred over another. Many options for birth control exist, including the pill, condoms, IUD, tubal ligation, vasectomy and abstinence.

When couples realize that they want permanent birth control, the decision is usually between a vasectomy in the man or a tubal ligation in the female. Each of these is designed to be permanent. If you think you might decide to have a few more kids in a year or two, vasectomy is not the right choice. While the technology to undo a vasectomy does exist, it is much more complicated and expensive than these billboards around town would have you believe. Because vasectomy is simple, minimally invasive, and can be performed without general anesthesia, it has become the preferred method of permanent birth control.

### Risk of Failure

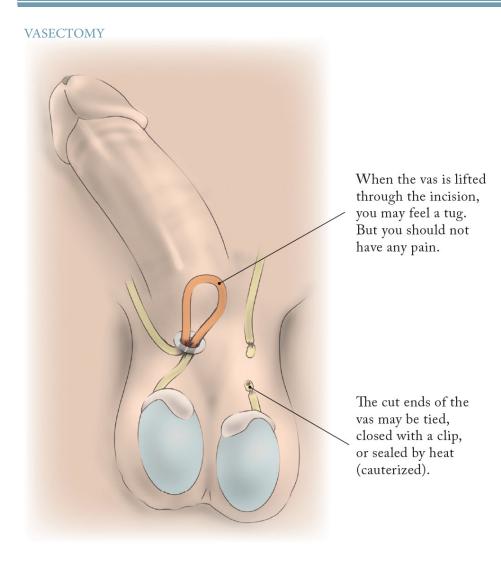
The risk of pregnancy following proper vasectomy is approximately 1 in 100,000. The main risk for pregnancy after vasectomy is recanalization, or the tubes spontaneously growing back together. Obviously, this is very rare, but it is possible. Recanalization of the tubes was more an issue in the past when vasectomy consisted only of kinking or tying off the tube in a single location. Today's procedures involve multiple safeguards for a more reliable result: dividing the tube with removal of a small segment, cauterization closure of the tube ends, and clipping with titanium clips. We do all three.

The other main risk is residual sperm in the tube. Sperm naturally live in the vas deferens and can survive in the entire length of the tubing. When the vas is divided, no new sperm can get into the system, but the existing sperm in the system have to be flushed out. As a definite warning, urologists caution patients to continue using some alternative form of birth control until a semen test confirms that all of the sperm have

been flushed out. Usually this flushing process will occur by natural ejaculation over the first 6 weeks after vasectomy, but it can take over a year. A fresh vasectomy is not considered to be a reliable form of birth control until a semen analysis confirms complete absence of sperm.

Nothing is 100% reliable for birth control except never having sex again. Most men will not opt for that.

What about Tubal Ligation? Tubal ligation may be equally effective to vasectomy, but carries a much higher surgical risk to perform. Unless a woman is ready and prepared to get her tubes tied at the time of a cesarean-section, separate elective tubal ligation requires another general anesthetic and another invasive surgery. While anesthesia and elective surgery is generally considered very safe, cases do exist where otherwise healthy patients have catastrophic The American Board of events. Anesthesiology recognizes a 1 in 100,000 risk of unexplained death due to general anesthesia for all patients. In addition, errant injury to vital neighboring organs during the procedure is possible,



including bowel, bladder, and major blood vessels. Clearly, the risk for tubal ligation is much higher than the risk of vasectomy. Vasectomy is safer and simpler.

### **Anatomy Considerations**

To review anatomy, the vas deferens is the tube that connects the testicle to the prostate and on to the urinary channel. During ejaculation, sperm is propelled out of the testicle and up the vas deferens to the prostate gland where the sperm mixes with seminal fluid. The majority of the semen is made by the prostate and seminal vesicles, with only a tiny portion coming from the testicle. The muscular contractions of orgasm then push the semen thru the urethra and out of the penis. The normal volume of semen in an ejaculation is only 3 cc's of fluid but contains several hundred million sperm- any one of which may find the egg and create a pregnancy.

Vasectomy surgically blocks the vas deferens so that the sperm cannot reach the outside world. After vasectomy, the sperm trapped in each testicle spontaneously decay and the testicle slows down its production of new sperm.

Overall, there is no real change that

is sensed after vasectomy. Semen is still ejaculated with orgasm; however, there is no sperm in the semen. Everything else about the penis and testicle remain the same. Vasectomy does not affect orgasm sensation, or penile sensitivity or erection. Testosterone production is unaffected so there is no change in libido, voice, hair pattern, or muscle mass.

There is no evidence that vasectomy causes any future health-related problems. One research project suggested that there might be a higher risk of prostate cancer in men who had previously had vasectomy. Never has there been any physiologic explanation for this conclusion, and in fact, many other studies have shown no increased Thus, currently, most urologists risk. agree that vasectomy patients are not at any additional risk for prostate cancer, and we do not recommend any additional screening for prostate cancer just because someone has had a prior vasectomy.

## Where to do the Procedure:

Vasectomy is a simple, outpatient procedure. Nightmare accounts of "horrible pain" during vasectomy are nothing more than "urban legends" blown wildly out of proportion.

Vasectomy is commonly performed in an office setting using local anesthesia. I usually give a tablet of valium to take about an hour before the procedure or a sedative shot in the office. I then numb the skin of the scrotum with a tiny pediatric needle and do the procedure. The whole process usually takes less than 30 minutes. I recommend a driver to take you home, and a driver is an absolute requirement if you've had any type of pain medicines or sedatives.

Some patients prefer heavier sedation for the vasectomy. In the surgery center, we can safely let you drift off to "la-la" land with heavier anesthesia. It is the same operation but you are completely out of it while we perform it. You absolutely have to have a driver to take you home after anesthesia. It is generally a matter of patient preference to choose the office site or the surgery center. Some insurances do not cover the surgery center. Most patients prefer the ease and convenience of an office procedure, particularly if there are added costs for the surgery center.

### Procedure:

To perform the procedure, the surgeon feels the vas deferens in the scrotum and then exposes it thru a small incision in the scrotal skin. The vas deferens is then divided and sealed with either cautery, titanium clips, or both. Most urologists send a small specimen of the vas deferens to the pathology lab for verification. Depending on how supple and loose the skin of the scrotum is, the operation may be done thru a single or double incision. The decision for one versus two incisions really varies with each case, and does not have any bearing on post-operative pain and suffering. Some urologists advertise a "no scalpel" technique for vasectomy. To patients, this is appealing as it suggests a less painful procedure. In reality, the procedure and recovery are the same.

The no scalpel technique uses scissors

to make a small hole in the skin rather than a scalpel. After that the same division of the vas is performed and the same mild tenderness results. Most of the "horror stories" that exist surrounding vasectomy procedures are more related to what patients do the day after the vasectomy than to the operation itself.

# Medical conditions requiring special consideration:

conditions Some require special considerations before performing vasectomy, particularly severe medical illnesses, ongoing use of any blood thinners (including aspirin), previous hernia or testicle surgery, or history undescended testicle. These situations often necessitate that the procedure to be done under anesthesia

### Vasectomy Preparation

To prepare for a vasectomy, patients should bathe or shower on the morning of the procedure. Patients need to be off any blood thinners (including aspirin and anti-inflammatory medications) for 7 days prior to the procedure to minimize the risk of unnecessary bleeding. Wear loose clothes and bring a jockstrap as these allow for a comfortable bandage afterwards. If you are planning to have full anesthesia for the vasectomy in the surgery center, you must not eat or drink anything after midnight prior to the procedure, and you must also have a driver to take you home. If only local anesthesia is planned, you may eat a light breakfast on the day of the vasectomy and drive yourself. If we use any pain medications or sedation for the vasectomy, you will need a driver. Make sure to plan your vasectomy at a convenient time so that you can take it easy for several days following the procedure.

## Post Op Instructions – PAY ATTENTION

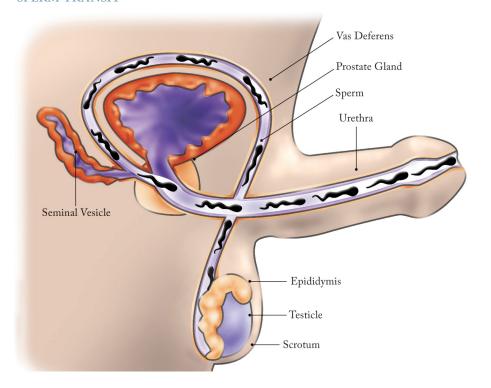
Vasectomy is usually simple and easy. Adherence to instructions afterwards however is what will make the ongoing recovery uneventful. Following a vasectomy, patients should go directly home and take it easy for the next 48 hours. Laying around is best, but at least prop your feet up and relax. Keep an ice pack on the scrotum as much as you can stand it for the first 24 hours, as this will help control any swelling.

Even if you feel
perfectly normal
the day after a vasectomy,
you should do
nothing
more
than prop your feet up and
watch television.

Do not do any strenuous activities, such as sports, working out, running, walking, golfing, hunting, karate lessons, etc for 1-2 weeks afterwards.

You may take a quick shower at any time afterwards, but avoid baths, hottubs, or swimming for a week, as soaking in water dissolves the stitches quicker

#### SPERM TRANSIT



than otherwise. Avoid any exercising or sports for 1-2 weeks (sex is equivalent to exercising), and when you resume these activities, start gradually. If you are hurting, it is fine to take aspirin, ibuprofen or Tylenol, and if the pain is bad, use the narcotic pills that were prescribed. Do not consume alcohol or drive when taking narcotics. If an antibiotic is prescribed, take it as directed and take it all. Stitches are often used to close the skin incisions, and they will dissolve on their own after 4-7 days.

## Complications

After a vasectomy, it is normal to have minor bleeding at the skin site, usually no more than a stain. There may be slight redness or swelling, and some cases the skin or scrotum may have a black and blue discoloration. The associated pain is usually no more than a dull ache. If there is high fever (over 102 degrees), undue pain or excessive bleeding (soaking thru multiple bandages), report this to your doctor.

The complications of vasectomy are usually minimal. Occasionally, the testicles may have aching for more than

just a few days. This is due to testicular congestion that develops when the vas deferens has been blocked. It will usually resolve spontaneously within a few weeks time. Longterm pain at the site is a potential complication related to any type of surgery, but chronic testicular pain from vasectomy is very rare, reported in less than 1% of vasectomies. The benefits of vasectomy as a permanent form of birth control far outweigh any minor risks.

# Is Vasectomy safe long-term?

There is no evidence that vasectomy causes any future health-related problems. One research project suggested that there might be a higher risk of prostate cancer in men who had previous vasectomy. Never has there been any physiologic explanation for this conclusion, and in fact, many other studies have shown no increased risk. Thus, most urologists currently agree that vasectomy patients are not at any additional risk for prostate cancer, and we do not recommend any additional screening for prostate cancer just because someone has had a prior vasectomy.

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