VASWEB VASECTOMIES AND REVERSALS

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VASECTOMY - SIDE EFFECTS, POSSIBLE COMPLICATIONS, ALTERNATIVES & INFORMED CONSENT

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 the USA. 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 will experience swelling and a low-grade ache in one or both testes anywhere from three days to six months after the procedure. This is 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, but for rare patients swelling and discomfort will occur more than once and/or will be severe enough to require prescription pain medications, stronger anti-inflammatory drugs, or more days off from work. A small number of men will develop a grape-sized hematoma (blood clot) after use of the spray applicator for anesthesia which typically is self-resolving over the course of 1-2 weeks.

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. Rarely patients may develop a subcutaneous hematoma after use of the spray applicator for anesthesia that may cause more noticeable and prolonged discomfort on that side. Very rarely, hospitalization and surgery may be required in the case of large hematoma or very severe infection (abscess)(Potential surgery may, for example, include drainage of a large clot or abscess through a scrotal incision in an operating room under general anesthesia). A Syncopal ("fainting") episode may rarely occur during or soon after the vasectomy procedure. It is thought that this may represent a sort of panic attack with the body's response being a drop in blood pressure and feeling cold/clammy. Although we do encourage patients to have a driver available after vasectomy, we routinely allow patients to drive themselves home after the procedure as long as no sedating medications were utilized since this is a routine office-based procedure analogous to visiting the dentist. Patients that drive themselves are mandated a 15-minute waiting period prior to getting in the driver's seat. Despite this waiting period, a syncopal episode while driving a motor vehicle after the procedure is still theoretically possible and may incur significant morbidity, unforeseen costs, or death.

Late complications include:

- 1. A <u>sperm granuloma</u> is a pea sized sometimes-tender mass near the vasectomy site, above the testicle which results when the body reacts to and walls off sperm which may leak from the lower (testicular) end of the cut vas. A sperm granuloma may actually enhance the likelihood of reversal success. Some are tender enough to require removal in the office under local anesthesia
- 2. <u>Post-vasectomy pain syndrome</u> 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. Chronic pain may also be localized to the epididymis or the vasectomy site. Because chronic pain is so subjective, reported rates vary but compiled data would suggest that this is a significant problem for 1-2% of vasectomy patients, though it seems to be less common than this in our practice. In most cases, the pain is relieved with time and/or medication. Vasectomy reversal, removal of the epididymis, removal of vasectomy site, or a special procedure called neurolysis may rarely (less than 0.1%) be required to alleviate post vasectomy pain..
- 3. <u>Vasectomy Recanalization/Failure.</u> <u>Recanalization</u> 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. <u>Early</u> recanalizations occur during the healing process. They are detected at the time of follow-up semen checks when live (moving) sperm or significant numbers of non-motile (not moving) sperm are still seen in semen specimens within six months after the vasectomy. An unwanted pregnancy does not occur if the couple has used other forms of contraception as advised. Our rate of early recanalization is about 1 in 2000 patients. In the case of persistent sperm present in the semen, a repeat vasectomy procedure is required. <u>Late</u> recanalization refers to the return of live sperm to the semen at some time after the semen has been confirmed to be sperm-free by microscopic examination.. Late failure resulting in pregnancy is possible but rare, odds being **about 1 in 2000** over the lifetime of the patient, a rate of failure MUCH lower than with any other form of contraception. Our office does not require another semen check after the absence of sperm has been confirmed, but patients may return with or mail a second sample any time after vasectomy to achieve an added index of confidence.
- 4. <u>Anti-sperm antibodies</u> do appear in the blood of about half of the patients who undergo vasectomy and patients who develop antibodies may 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.
- 5. <u>Hydrocele</u> after vasectomy is rare. Hydrocele is fluid around the testicle. This condition is benign and usually doesn't cause symptoms. If the hydrocele fluid is bothersome, there are procedures to remove the fluid.
- 6. <u>Tethering of the vas deferens</u> is rare, but can occur if one of the cut ends of the vas deferens heals too close to the scrotal skin. The tethered vas can cause a bothersome pulling sensation that may require an additional corrective procedure.

7. <u>Sexual side effects.</u> There are reports on the Internet in which contributors claim that they experienced a <u>decrease in erectile function, libido, or climax intensity</u> after vasectomy. In 2006, we mailed 400 surveys to men whose vasectomies had been done more than six months prior to the survey. One hundred nineteen (119) surveys were returned, and THESE ARE THE RESULTS OF THAT SURVEY:

Since your vasectomy, how have the following changed?	Much less	Slightly	No change	Slightly more	Much more
	1033	1633	 	more	more
Sex drive (libido)	2	4	92	16	2
Ability to obtain and maintain erections	0	5	110	4	0
Rigidity (stiffness) of erections	0	5	109	4	1
Strength of orgasm (climax) sensation	0	6	98	12	1
Semen volume (the amount of fluid that comes out when you ejaculate)	5	16	86	12	3

There is no physiological explanation for these changes, either positive or negative, but men should consider the slight possibility of a negative influence of vasectomy on their sexual responses. These changes may simply represent changes that would have otherwise occurred to these men over 6 months, regardless of whether they had a vasectomy or not.

There are several **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, Plan B, or the "morning-after" pill) will prevent pregnancy if taken within 72 hours of intercourse during which no contraception was used, or during which a condom slipped off or broke.
- 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 and is 100% successful**. 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.

CONSENT FOR STERILIZATION

I, the undersigned, request that Douglas G. Stein, MD or Alex Galante, MD perform a bilateral vasectomy, a procedure to produce obstruction of the vas deferens for the purpose of producing sterility. I understand there can be **no absolute guarantee** that this or any procedure will be successful. It is understood, however, that my semen will be checked following the operation. I understand that <u>contraception must be practiced until there are no sperm present</u>. I also understand that while the reversal success rate is quite good, it is not 100%, and vasectomy should therefore be considered a permanent or non-reversible procedure. I recognize a small chance that I might have to come to Dr. Stein and Galante's Lutz/Tampa office or go to a hospital for evaluation and treatment of a very rare complication. By consenting to vasectomy and accepting the risks outlined above, I release Drs. Stein and Galante from liability for time lost from work, salary unearned, and medical expenses incurred to treat complications.

I have read and I understand all paragraphs of this document.

Patient's signature:	_Wife's signature (optional)
Witness	_Date