



## SHOALS UROLOGICAL ASSOCIATES, P.C.

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### VASECTOMY DISCUSSION

#### TERMS:

VAS DEFERENS:	The tube that transports sperm from the testes.
VASECTOMY:	Removal of a small portion of the vas deferens.
TESTES:	The egg-shaped glands in the scrotum that make sperm and male hormones.
EPIDIDYMIS:	Small gland, outside the testes, where sperm matures before entering the vas.
PROSTATE:	The gland that makes the seminal fluid. When mixed with sperm from the testes makes semen.

#### ANATOMY:

Sperm is produced in the testes. From there, sperm travels into a small gland that is located just outside the testes called the epididymis. It is here that the sperm stays as long as six weeks to mature. The tubes of the epididymis join together at the very end of the epididymis to form one common tube called the "vas" or "vas deferens." It is the vas that transports the sperm into the body where it enters the prostate gland. The prostate gland is responsible for making the seminal fluid that carries the sperm. The sperm from the testes and the seminal fluid from the prostate join together to make semen. The semen is then ejaculated through the penis.

#### THE PROCEDURE:

A vasectomy is started by anesthetizing a small area of the scrotum (the skin sac that the testes are in) and then making a very small opening on each side of the scrotum. This is accomplished after local anesthesia is injected under the skin. We are then able to move each vas to the opening and remove a small piece and then seal the ends using heated cautery or a suture tie.

By removing a piece of the vas and obstructing the channel, sperm is no longer able to be transported into the prostate and, therefore, infertility results. The operation usually takes 30 minutes, and most patients can get up and walk out of the office soon afterwards.

#### RISKS:

The operation does have risks. As with any operation, simple or complicated, there is a chance of bleeding, pain, or infection.

We encourage men to stay off their feet after the operation for a few days and use ice packs to keep the swelling and bleeding to a minimum. We encourage men to wear a scrotal support or jockey briefs to provide some pressure to reduce bleeding, and we ask that patients not take aspirin for a week before their procedure and for a short time afterwards, if there are no complications.

Complications from a vasectomy can occur despite precautions. Some patients can have bleeding or infection. Some patients will have discomfort at their incision. Some people will have discomfort in their testes or around the vasectomy site for a period of time. This is due partly to the back pressure that builds up because the sperm cannot get out. For almost all of these cases, the pressure in the testes which cause sensitivity finally subsides. Another possible cause of pain is called a "sperm granuloma". This is caused when the sperm find their way out of the tied or cauterized end of the vas. This cannot be prevented in some circumstances and the sperm that is released into the tissue is irritating and causes a small nodule. These nodules usually resolve in time as the body seals them off, but can persist and can be painful. On rare occasions a sperm granuloma needs to be removed. This essentially is simply redoing the vasectomy.

Fortunately all of these complications are rare and in most cases the discomfort that occurs is handled with a short course of anti-inflammatory drugs or pain medicine with good resolution.

Another possibility is an infection in the epididymis called epididymitis. This again is rare and can be caused by the back pressure or infection or inflammation within the epididymis. Epididymitis is treated with bed rest, elevation, and antibiotics and in almost all cases resolve quickly.

#### UNIQUE RISKS OF VASECTOMY:

Vasectomy has a few unique risks or complications and these include the possibility of recanalization. Recanalization means that, despite removing a piece of the vas and sealing the ends, the ends grow back together making the man fertile once again. In almost all instances recanalization takes place within the first few months after the vasectomy. To make certain that recanalization has not occurred, patients must bring their specimens (as instructed at initial visit) in and they are sent to the lab to make sure there are no live sperm seen. Once no sperm has been confirmed on the second specimen we feel secure that the patient is sterile and does not need to use pregnancy prevention at that time.

Since a fair amount of sperm is stored downstream from the portion of the vas that is removed, the initial ejaculations always contain sperm. After the obligatory one week wait before engaging in sexual activity, please use pregnancy prevention when you return to sexual activity. After about 10 to 15 ejaculations, the first specimen can be brought in for lab testing to determine if any live sperm are present. If the first one shows no signs of live sperm, a second one can be brought in after another 10 to 15 ejaculations. **PREGNANCY PREVENTION SHOULD BE USED UNTIL YOU ARE TOLD TO STOP!!!!**

Some patients have very poor migration of sperm in the vas after the vasectomy, and cases of persistence of sperm in the semen checks can be seen from six months to a year. While this is rare and even if the sperm counts are low, we do not consider you **STERILE** until we have had two completely negative sperm counts two weeks apart. If after a prolonged period of follow-up, sperm continue to be present in the semen check, particularly sperm that are active, we feel that recanalization has occurred. While this occurs in only a small percentage of patients, it does necessitate a repeat vasectomy on both sides.

The semen specimens that are needed for your checks do not have to be fresh. We are not looking for sperm motility or action and we consider any dead sperm seen as a potential pregnancy. The semen specimens can be placed into one of the containers that we give you. The easiest method of collection is to use a condom and dump the contents of the condom (not the condom) into the container. The container does not have to be refrigerated and can be brought in the following day. Please write your name and date of birth on the container label.

#### LONG-TERM EFFECTS OF VASECTOMY:

Another potential complication of vasectomy is the long-term effects of the procedure. Controversies have existed for years about the possible side-effects of vasectomy. Large studies have been done throughout the country looking at groups of patients who have had and have not had vasectomy and almost all of these studies have shown absolutely no difference in any medical problems. A recent study, however, has suggested the possibility that there may be a slight increase in the chances of developing prostate cancer in men who have had vasectomy. This difference does not show up for more than two decades, and the structure of the study that was done is open to a fair amount of criticism. Larger studies have not shown this same finding and further studies are being done. We would be glad to discuss with you and your partner any of the above risks or complications and provide you with additional reading if needed.