## NO SCALPEL VASECTOMY

Vasectomy is a surgical procedure which results in sterilization of men. This procedure should not be chosen by a man without considering the consequences. Vasectomy is a permanent form of sterilization. For those men who have children, they must be absolutely sure they do not want more children in the future. Unforeseen circumstances such as loss of one's spouse or children might affect a person's desire for sterility.

Vasectomies have been performed for many years. Recently this method of birth control has continued to gain popularity among men. Both testosterone and sperm are produced from the testicle. Testosterone is an important male hormone, which is necessary for normal male sexual function. This hormone enters the bloodstream via veins that surround the testicle. Sperm are transported though the vas deferens via the groin to the prostate gland and seminal vesicles where fluids are added that result in the production of semen. From there, the sperm flow out of the penis during ejaculation. A vasectomy is a procedure in which both vas deferens are cut to prevent the flow of sperm out the penis. This procedure does not affect the flow of testosterone, and therefore does not affect a man's sexual function.

Recent advances have minimized the discomfort associated with this procedure. Dr. Li, a physician from China, developed the no-scalpel vasectomy in 1983 in an effort to make male sterilization more acceptable in China where female sterilization was done twenty times more often than male sterilization. This represented a huge drain on the medical resources, given the need for hospitalization and general anesthesia for female sterilization. Having perfected this technique in China, Dr. Li began training other physicians, including those from the US. In the early 1990's, an organization called the Association for Voluntary Sterilization (AVSC) began offering training in this method. I became one of the first New Mexico physicians trained in this technique, and have also taught other physicians as well. Having performed both the old method as well as this one, I have been impressed with the overwhelming advantages of the no-scalpel technique. It is faster (20-30 minutes), generally associated with less blood loss, and most importantly, less painful. Most patients do not require any narcotic pain medicine. Most patients take only acetaminophen for 1 - 2 days, and some patients do not require any medicine at all! Generally, patients can expect some mild groin discomfort for about 7 days, although occasionally patients experience mild discomfort that lasts longer. Most patients return to work in 1 - 2 days.

Any surgical procedure can have complications associated with it and this one is no different in this regard. 1) Infection is an infrequent occurrence. Generally the pain should improve daily after the procedure. If the pain starts to improve, and then worsens, you should call to discuss this. 2) Bleeding is uncommon, but the potential is real. There are many tiny blood vessels around the vas deferens that could bleed if cut. I use surgical clips instead of suture to minimize this risk. 3) There is a 1/2000 failure rate for this procedure (depending on the study quoted) which means that the tubes can grow back together at a later date. I check a sperm sample at six (6) weeks after the procedure to be certain that the patient is sterile. Some other method of birth control must be used until this time. 4) Sperm granuloma is a small area of inflammation that can result from leakage of sperm from the cut vas deferens. Generally this resolves on its own, but rarely needs to be removed. 5) Rarely patients can experience persistent post operative pain. 6) Vasectomy is a *permanent* form of sterilization. While there are methods to reverse this, they are quite expensive, and the success rate is 40 - 50%.

There are a few things that should be done prior to the procedure.

- 1. Purchase an athletic supporter or snug pair of brief underwear. Elevation of the testicles for the first week minimizes the discomfort.
- 2. Avoid the use of aspirin for the week preceding the procedure.
- 3. Do not eat two (2) hours prior to the procedure.
- 4. Please have a cold pack or ice pack available for use the first 1-2 hours after the procedure.
- 5. Shaving of the scrotal area is *not* needed.

After the procedure, please keep these things in mind:

- 1. Rest for the first 1-2 hours. Use the ice pack wrapped in a towel intermittently (on 10 minutes, off 5 minutes). 2. Take acetaminophen as needed for pain every four hours
- 3. Avoid strenuous exercise for the first three days. If you exercise regularly, try doing half of your usual routine. On the third day if you are not uncomfortable, you may return to your usual schedule.
- 4. Call if your pain seems more than what you expected, or if it does not improve on a daily basis. You should also call if you have any swelling. Some bruising is normal.
  - 5. Plan to return for follow up in six weeks. You should bring a fresh (collected within 120 minutes and kept at room temperature) semen specimen with you.
- 6. If at any time you have doubts about whether your recovery is normal, please feel free to contact me.