

# Tacoma Urology Center

## **Commonly Asked Questions About Vasectomy Reversal**

Many of our patients have questions about various aspects of microsurgical vasectomy reversal. Some of the more commonly asked questions are discussed below. Please feel free to contact us if there are other questions which we have not covered.

- **Are There Health Risks to Vasectomy?**

There has been much interest and research on this subject in recent years. While several recent studies have suggested an increased risk of prostate cancer in men after vasectomy, other studies have not shown this risk. Other potential health problems, including heart and vascular disease, arthritis, and autoimmune disorders, have also been suspected in a few studies in the past. To date there is no conclusive medical evidence, however, that vasectomy causes these or other health difficulties.

Occasionally, a man will have chronic testicular discomfort after a vasectomy, due to excessive pressure in the epididymis. Vasectomy reversal does appear to be the best treatment for this relatively uncommon condition, which often responds poorly to conservative treatment such as antibiotics or anti inflammatory medication.

- **What is Microsurgery?**

Microsurgery is a surgical technique in which very high magnification is used to place extremely fine stitches, much finer than a human hair. This is done using an *operating microscope*, which allows the surgery area to be magnified from 15 to 40 times normal. This technique allows repair of very small structures, such as small blood vessels or the vas, with great precision. In vasectomy reversal, between 25-35 sutures are used for each vas tube, in two separate layers. The inner channel of the vas is about the diameter of a mechanical pencil lead, or the “o” in the word “God” on a penny. Between 8 and 12 sutures are used in this layer alone.

Many urologists claim to use “microsurgery” techniques for vas reversal, when in fact they are using optical magnification or “loops”. This technique only allows 2-4 power magnification, and uses much larger sutures which cannot accurately align the inner channel of the vas. This technique has significantly poorer success rates than reversal performed with true microsurgical technique.

- **What is a Vasoepididymostomy?**

The first portion of the sperm duct is known as the *epididymis*, which is about 1.5 inches long, and contains 20-25 feet of microscopic sperm ducts. Sperm mature and become active (*motility*) in the epididymis after they leave the testes. After vasectomy, some men will develop a leak of sperm from one of these delicate tubes, which results in scar tissue formation and a second blockage point in the duct. If this blockage is not repaired at the time of vasectomy reversal, the vas will remain blocked and the reversal will fail. The duct in the epididymis is even smaller than the inside channel of the vas, and it has an extremely thin wall. Repair of a blockage of the epididymis is impossible without microsurgery. Microsurgical vasoepididymostomy is the most technically demanding procedure performed in surgery, in any specialty.

The need for a vasoepididymostomy can only be determined at the time of surgery, by evaluating the fluid from the testes for its appearance and the presence or absence of sperm.

- **I Have Had a Previous Reversal Which Failed. Is There Still Hope for Successful Reversal?**

Because of the extremely small size of the sperm duct, even a perfect repair using microsurgical techniques can sometimes fail to produce sperm. In uncomplicated reversals where sperm is present at the time of surgery, this occurs about 7-8% of the time (1 in 16 men). In complex repairs involving the epididymis on both sides (the most difficult type of repair), failure is seen in about 1 in 3 men. Non-microsurgical reversals fail much more frequently than this.

A reversal which fails to produce sperm is very disappointing. Fortunately, in most cases repeat reversal can be done with good success rates. The chances for success depend on the reason for failure of the original surgery. Reversals fail for two reasons: scarring at the site of reconnection (the most common cause for failure after non-microsurgical reversals), and failure to recognize or deal successfully with epididymal blockage at the time of first surgery. If the cause of failure is scarring at the reconnection site after an uncomplicated vasovasostomy, success rates for repeat reversal are nearly identical to first time surgery. If there is an epididymal blockage, or if there has been previous surgery on the epididymis, then the success rate for repeat surgery is considerably lower. Repeat surgery in this situation is also longer and can be quite difficult.

- **What About Laser Surgery?**

Some physicians perform vasectomy reversal using a micro laser. In this technique, the ends of the vas are brought together using just a few sutures, and the outside of the vas is “spot-welded” with the laser. The technique does not align the inner channel of the vas,

and therefore the chances for scarring and failure are higher. While somewhat better than non-microsurgical techniques, the success rates may be disappointing. Furthermore, if an epididymal repair is needed, the laser cannot be used because of the extremely delicate nature of the epididymal tubule.

- **What About Aspirating Sperm?**

Many patients inquire about the possibility of aspirating sperm from the vas tube instead of vasectomy reversal. This is not as simple or successful as it might seem. In order to aspirate sperm, the epididymis must be explored surgically, similar to vasoepididymostomy. Since only a tiny amount of sperm can be retrieved, *in vitro* (test tube) fertilization must be used. The expense of *each attempt* at pregnancy using this approach is commonly \$8000 or more, and most studies show only 5-10% pregnancy rates per attempt. As a result, vasectomy reversal is generally a much better approach for most patients.

- **Will My Health Insurance Cover Vasectomy Reversal?**

Many health insurance policies specifically exclude coverage for infertility or reversal of vasectomy. If a man has chronic testicular discomfort after vasectomy which has failed to respond to medical treatment, and the treatment is documented, insurance companies will sometimes cover the procedure on this basis. If you have such a condition, or if you are planning on submitting to your insurance company, be sure to notify us prior to the surgery. We can help with the billing process, including letters to your insurance company if needed.

If you have any further questions, please contact us by phone at **(253) 272-8822**.