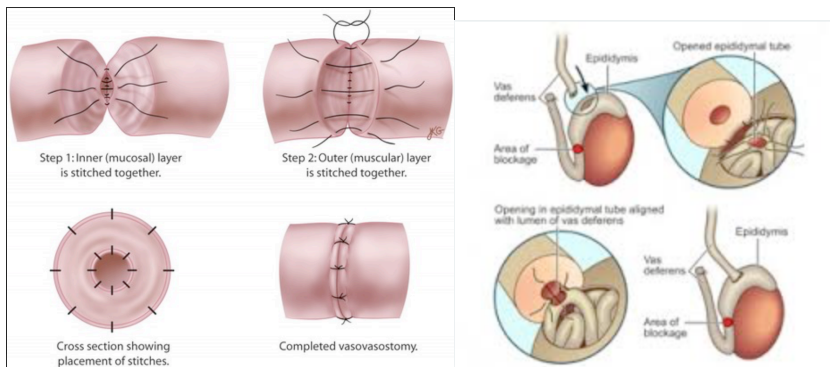


Vasectomy Reversal

Microsurgical Vasovasostomy and Epididymovasostomy

What is a microsurgical vasectomy reversal?

A vasectomy reversal is an operation that re-establishes a connection between the two ends of the vas deferens that were separated during a vasectomy. There are two types of repair that can occur during the procedure. A *Vasovasostomy (VV)* is a connection between the two ends of the vas deferens. This is the more common of the two procedures. The other type of repair is called an *Epididymovasostomy (EV)*. An EV takes place if there is a blockage in the epididymis, which is identified during the time of surgery. Each procedure occurs under an operative microscope, which is currently recognized as the “Gold Standard” for vasectomy reversal.



Vasovasostomy

Epididymovasostomy

What are the alternatives to vasectomy reversal?

Before a vasectomy reversal is performed to restore fertility, the female partner’s reproductive history and potential must be assessed. During the conversation, fertility goals of the couple will be taken into consideration to ensure that the proper treatment pathway is selected. Alternative options to vasectomy reversal are epididymal or testicular sperm aspiration or extraction (MESA or TESE). These procedures are two different ways that sperm can be taken from the male reproductive tract to be used with assisted reproductive technologies (ART)—such as In-Vitro Fertilization (IVF) with or without Intracytoplasmic Sperm Insemination (ICSI). The decision for vasectomy reversal versus sperm removal is made based on how many children the couple desires and the costs associated with each procedure.

What are the considerations before surgery?

Cryopreservation (sperm banking) of sperm is one decision that should be made prior to vasectomy reversal. This is a topic that Dr. Owen will discuss during your initial evaluation and is performed as a “back-up” in case inadequate sperm counts are present after surgery. The decision to undergo sperm banking will be made based on several factors including: time from vasectomy to planned vasectomy reversal, age of patient, age of partner and long term fertility goals. If sperm banking is desired, sperm can be taken at the time of the vasectomy reversal from the testicular end of the vas (if motile sperm are present) or by a separate incision on the testicle. Sperm can be stored with the TTUHSC OB/GYN Laboratory. Please call 806-743-2352 to set up a storage account. Timing will be coordinated with the lab at the time of surgery.

In general, there are no recommended pre operative laboratory tests that are needed unless an unusual health concern is present prior to the operation.

What influences the type of connection (Vasovasostomy versus Epididymovasostomy)?

The type of vasectomy reversal will be decided at the time of the operation. When the vas is opened, fluid will flow from the testicular side of the vasectomy site. If sperm are present (assessed by microscopic examination in the operating room), a VV will be performed and we expect 90% or more of patients to have a return of sperm to the semen with an associated pregnancy rate of 50-70%. If no sperm are present, yet the vasal fluid appears abundant and appropriate for sperm production (e.g., clear, watery), then a VV is performed with a pregnancy rate of approximately 50%. If poor quality fluid is present (e.g., thick, pasty) and sperm are absent, or no fluid at all is found, then an EV is performed with an associated pregnancy rate of about 40%.

How is the operation performed?

A two-layered anastomosis (connection) is performed with microscopic suture and the latest microsurgical equipment. This is an outpatient surgical procedure, so the patient will go home on the day of surgery. Operating time is approximately 3-4 hours with an EV taking slightly longer to perform than a VV. The surgery takes place under general anesthesia.

What to expect after vasectomy reversal?

After the procedure, Dr. Owen will speak to you about the operative findings and the type of repair that was necessary. A follow up appointment will be scheduled for approximately 2 weeks with a semen analysis scheduled 6 – 8 weeks after repair. It is important to understand that semen analysis may not reflect final counts until 6 months after VV and up to 18 months after an EV. If sperm counts return lower than expected, monthly semen analyses will be scheduled until counts stabilize or pregnancy occurs. Sometimes anti-inflammatory medication (Aleve, Ibuprofen, Mobic) is needed to reduce postoperative scarring at the connection site.

Postoperative Instructions

1. Remove dressing from athletic supporter 24 hours after surgery. Continue to use scrotal supporter for 1-2 weeks.
2. Expect some redness and bruising near the incision(s) and on part of the scrotum for about a week. The stitches used to close the incision will dissolve on their own.
3. Pain medication will be provided to your pharmacy on the day of the procedure. This will help with immediate postoperative pain and also reduce swelling.
4. To avoid further swelling, you can place an ice pack (wrapped in a towel) on the scrotum for 15 minutes at a time. This can be done every hour for 36 hours if desired.
5. Please wait 48 hours before taking shower. Please refrain from taking a bath for at least 7 days.
6. You are encouraged to resume a healthy, well-balanced diet after your surgery. If you experience any nausea, please limit your diet to mainly clear fluids.
7. Slowly return to NON-STRENUOUS activity (walking within the house, riding in a car) within 48 hours. If you feel any discomfort, please return to resting. NO RUNNING, JOGGING, WEIGHT LIFTING or other vigorous activity for 2 weeks after surgery.
8. I recommend taking 1 week off from work to “recover” but this is not mandatory. Work from home or sitting at a desk is ok within 3 days after surgery.
9. No intercourse for 10 days after surgery. An early return can disrupt the surgical connection of the vas.
10. Please schedule a follow up appointment 10 days to 2 weeks after surgery for an evaluation of the wound. A semen analysis will be scheduled for 6 weeks following surgery.
11. Some discomfort is expected postoperatively. Common symptoms that may occur following surgery that **DO NOT** require immediate attention include:
 - a. Slight bruising of the scrotal or penile skin
 - b. Mild swelling of the scrotum
 - c. Small nodules in the scrotum (these represent healing of the new vas connection)
 - d. Small amount of thin, clear, pinkish fluid at the incision. Place gauze within underwear or scrotal supporter. This will stop after 1-2 days.
 - e. Sore throat, headache, nausea, constipation and body aches. This can occur after any procedure due to recovery from anesthesia.
12. Postoperative complication that **DO REQUIRE** immediate attention include:
 - a. Signs of infection: Fever, chills, warm, red, painful scrotal wound. Please call the office at 806-793-8787 for evaluation.
 - b. Hematoma: Worsening throbbing, pain, bloody discharge from wound or enlargement of scrotum.