

VASECTOMY REVERSALS: TECHNICAL DETAILS ABOUT THE SURGERY.

Microscopic Vasovasostomy (VV) and Epididymo-vasostomy (EV) – More Information:

A vasectomy reversal (VV or EV) is an operation that reestablishes a connection between the two ends of the vas deferens that were separated at the time of an earlier vasectomy. Sometimes during the microsurgical reversal, the vas deferens must be reconnected to the epididymis (epididymo-vasostomy) because of a secondary obstruction in the epididymis. Both procedures are performed entirely under a special operating microscope.

Sperm production takes place in the testis. After passage through the efferent ducts, sperm are stored and undergo maturation within the epididymis, a coiled microscopic tube that runs from the testis to the vas deferens. The vas deferens is responsible for directing and propelling the sperm into the urethra.

Increasing numbers of men are coming to the urologist for vasectomy reversals, most commonly because of remarriage and the desire to initiate a pregnancy. Vasectomy reversals are also requested by couples who have merely “changed their minds,” as well as by couples who have lost a child and are attempting to initiate another pregnancy. Fortunately, microsurgical advances are now resulting in significantly improved pregnancy rates.

The surgeon you choose should be skillful with microsurgical technique, as precise suture placement is critical to the success of the procedure. The surgeon must also have the ability to perform the more difficult epididymo-vasostomy procedure as well as a vasovasostomy (see diagram).

VASOVASOSTOMY

While there are many methods for performing a vasovasostomy, we prefer a strict, two-layer, watertight procedure (Fig. 1). Magnification with an operating microscope or magnifying loupes allows for a more precise reanastomosis. Selection of a single-layer, full-thickness closure versus a strict two-layer (mucosal and seromuscular) closure is best dictated by the experience of the surgeon, which, indeed, is the most important factor in achieving the desired outcome.

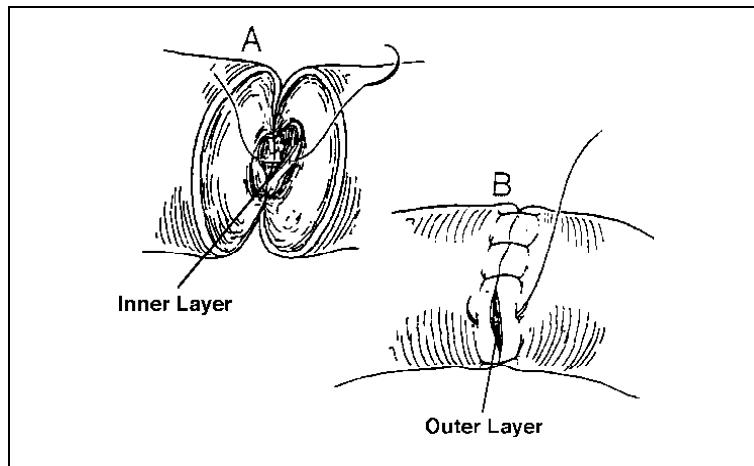


FIGURE 1. Strict two-layer anastomosis.

EPIDIDYMOVASOSTOMY

The skin incision for epididymovasostomy is the same as for vasovasostomy (Fig. 2). A single epididymal tubule is incised just before the obstruction and gently squeezed for fluid. The fluid is checked for spermatozoa and, if none are present, a more proximal transection is made. The anastomosis is then performed with two layers of extremely fine suture.

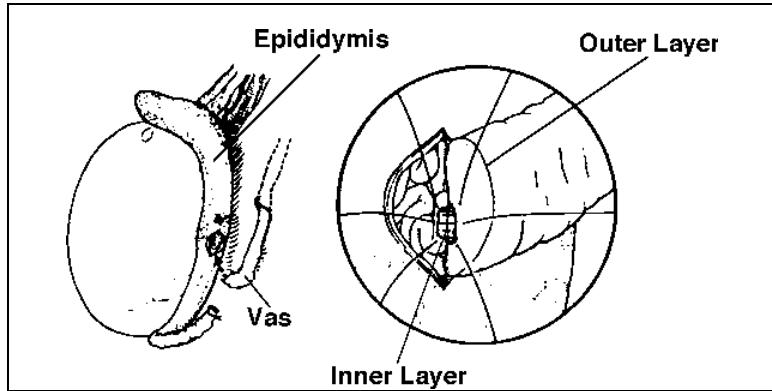


FIGURE 2. From Thomas AJ Jr, Howards SS: Microsurgical treatment of male infertility. In *Infertility in the Male*. 2nd Edition, 1991, p 366.)