

#### What is it?

A vasectomy reversal, also called a **vasovasostomy**, is an operation to undo a vasectomy and restore a man's ability to father a child. About 5 to 10 percent of the 500,000 men who have vasectomies each year change their minds later in life — either they want more children with their existing partner, or are in a new relationship. A **vasovasostomy** involves opening and reconnecting the previously cut and sealed halves of the vas deferens, the twin tubes through which sperm pass on their way to mix with semen in preparation for ejaculation. Sometimes, because of sperm blockage elsewhere, the surgeon may have to do another kind of vasectomy reversal procedure, called a **vasoepididymostomy**, either alone or in combination with a vasovasostomy.

#### What's the surgery like?

A vasovasostomy begins with the surgeon making an incision in the scrotum just large enough to locate the vas deferens and identify the site of the previous vasectomy. The surgeon removes the old scar tissue to unseal both halves of the vas deferens, then precisely aligns their ends and carefully sews them together, using a technique that prevents leaks and the formation of excessive scar tissue

during healing. After the reconnection, the surgeon puts the vas deferens back in the scrotum and sews the incision closed.

In addition to the intentional blockage the original vasectomy created in the vas deferens, other unexpected blockages may have occurred upstream in the epididymis, the tightly coiled tube next to the testicle where sperm cells mature before moving into the vas deferens. For various reasons, the epididymus can become obstructed, preventing sperm from reaching the vas deferens and necessitating a surgical bypass. If successful, this bypass, called a vasoepididymostomy, should restore an unrestricted pathway for sperm. However, it's a difficult operation because the epididymis is very small — only twice as thick as a human hair — and connecting the vas deferens to it is complicated. The success rate depends on several factors, including the surgeon's experience and the location of the blockage. The closer to the top of the epididymis the bypass is, the more immature the sperm flowing into the vas deferens will be, reducing the likelihood of a resulting pregnancy.

### How long is the surgery?

It's done in an outpatient setting, so you can return home the same day, usually several hours after operation. The type of anesthesia used is one factor in how soon you'll be discharged. There are several anesthesia options, which you and your surgeon should discuss ahead of time, to determine which is the safest and most effective for the particular case. General anesthesia makes you completely unconscious. A regional anesthetic using a spinal block leaves you awake but numbed below the waist. A local anesthetic only numbs the area of the incision.

#### What happens after the surgery?

You'll wear a scrotal supporter (jockstrap) to hold any bandages in place and to apply slight pressure to limit swelling and movement. As the anesthetic wears off, you'll feel some mild discomfort, swelling and bruising. Acetaminophen (Tylenol® or Daytril®) every four hours will help, as will an ice pack or bag of frozen vegetables placed on the scrotal supporter. Regular ice pack use during the first 12 hours will help minimize swelling. A small amount of blood oozing from the incision site is normal. You should change the bandage when it's stained. You can stop using the bandage when the oozing stops and it's stain-free, usually within a day or so.

### If the vasectomy reversal works, how soon will I be fertile?

After a successful vasovasostomy, sperm usually appear in the semen after a month. Following a vasoepididymostomy, sperm usually reappear after three to 15 months. Vasectomy reversal leads to pregnancy in more than 55 percent of couples within two years. While some pregnancies occur within a few months of the surgery, the average is about one year. Your doctor will examine your semen for the presence of sperm to determine if the operation was successful. Unless your partner becomes pregnant, the sperm count is the only way to tell if your vasectomy reversal worked. Even if the surgery restores sperm to your semen, it's possible your partner still may not become pregnant, since there are multiple factors — involving both men and women — that can affect fertility.

# How much does vasectomy reversal cost, and will my health insurance cover it?

Because vasectomy reversals frequently are elective rather than medically necessary procedures, Medicare and most insurance providers often do not reimburse the cost. However, you should still check with your health insurer to determine whether they cover the procedure. If you're paying out of pocket, please contact Cleveland Clinic's financial counselors at 216.444.1178 or 800.223.2273, ext. 41178 to get more information on the price of vasectomy reversal.

## How successful are vasectomy reversals done at Cleveland Clinic?

To date, surgeons have performed more than 1,000 vasectomy reversals at Cleveland Clinic. Success rates have ranged from 78 to 95 percent depending on the number of years since the vasectomy. At 10 years post-vasectomy, the success rate is 88 percent. After 10 years, the success rate is 78 percent.