

WHAT YOU SHOULD KNOW







# **ABOUT VASECTOMIES**

A vasectomy is an operation that causes a man to be sterile (not able to produce a child). This procedure involves splitting the vas deferens (tubes that carry sperm) and stops sperm from reaching the urethra. More than 500,000 men have a vasectomy in the U.S. each year.

To better understand vasectomies, knowing how the male reproductive system works is beneficial. Sperm are made in the testicles and mature in the epididymis before traveling through the vas deferens.

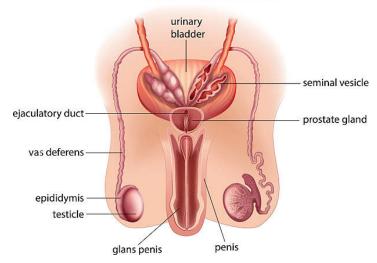
The vas deferens is a muscular tube with an inner canal. These tubes are approximately the size and shape of a pipe cleaner and can be found in the back part of the scrotum. The vas deferens begin at the lower part of the epididymis and pass through the scrotum and groin into the lower abdomen before ending at the prostate. The place where the vas deferens meets the duct from the seminal vesicle is called the ejaculatory duct.

Once sperm reach the ejaculatory duct and seminal vesicles, they are stored there until ejaculation. Nutrients and fluid from the prostate and seminal vesicle join the sperm, and this mixture is called semen. During ejaculation, the seminal vesicle and prostate contract. This forces the semen into the section of urethra that passes through the prostate before leaving the body through the penis.

Today, more couples use family planning and different types of birth control for protection from unwanted pregnancies. Birth control can be temporary or permanent. A vasectomy is a common, permanent form of birth control. The choice of birth control depends on each person's values and beliefs as well as their understanding of the advantages and disadvantages of each type of contraception. Couples are encouraged to learn as much as they can about the different forms of birth control and make a decision based on all of the information available.

This booklet discusses the benefits and consequences of vasectomies and is designed to answer questions, address concerns and offer information about this surgery. The booklet should serve as a supplement to information provided by your doctor or care team.

#### Male Reproductive System



# COMMON QUESTIONS

Many men have questions and concerns about vasectomies. Some of the most common questions are answered below based on current medical knowledge and personal experiences of men who have had a vasectomy.

### Is a vasectomy 100% effective?

Except for abstinence, no method of birth control is completely effective. A vasectomy does not guarantee that a patient will be sterile. However, the failure rate of a vasectomy is low. Couples should consider the benefits and risks of each method of birth control.

#### What is recanalization?

Recanalization occurs when sperm find a small connection between the tied up ends of the vas deferens. However, recanalization rarely happens.

# What advantages does a vasectomy have compared to other forms of birth control?

- A vasectomy is a safe and simple surgery with few side effects or complications.
- Vasectomies can be quick, and recovery time is usually short. The discomfort after the surgery can be easily managed.
- A vasectomy often has fewer risks than other forms of contraception.
- Compared to other types of birth control, a vasectomy can be cost-effective over time.
- A vasectomy is an outpatient procedure, so men can usually go home the same day of the surgery.

## Is a vasectomy the "ideal" form of birth control?

All forms of birth control have risks. However, the absence of contraceptives also carries risks, such as pregnancy.

#### Will a vasectomy affect my manhood?

Having a vasectomy will not change your sexual performance. Men who have had vasectomies can still get an erection and have sex, ejaculate and have an orgasm. Some couples say their sex life is better after a vasectomy since they do not have to worry about pregnancy.

Because sperm makes up only a small part of semen, the amount of ejaculation will be about the same after a vasectomy. Also, a vasectomy does not stop the flow of male hormones since they do not travel through the vas deferens. Testosterone and other male hormones are made in the testes and will still enter blood vessels and circulate throughout the body after a vasectomy.

# What happens to sperm made by the testes after a vasectomy?

Because sperm cannot go through the blocked vas deferens, the sperm cells break up. The body absorbs and replaces the sperm, just like other cells.

## Can a vasectomy be reversed if I change my mind?

One way to reverse a vasectomy is a microsurgery known as a vasovasostomy. In this procedure, a urologist will remove the scarring at the ends of the vas deferens and reattach the ends. While the ends of the vas deferens can be joined together again, sometimes fertility does not occur. The success or failure rate depends on the amount of time between a vasectomy and a vasovasostomy. A vasectomy should be considered a permanent form of birth control since vasovasostomies are not always completely effective.

## BEFORE YOUR VASECTOMY

#### **Medical Precautions**

The success of your vasectomy may depend on certain medical conditions. Talk to your care provider or urologist before your vasectomy if you have any of the following:

- History of excessive bleeding or blood disorders
- Allergy or sensitivity to local anesthesia, such as "caine" drugs or antibiotics
- Skin disease involving the scrotum, especially infected pimples
- Regular use of aspirin or medicines containing aspirin for a week before a vasectomy
- History of injury or prior surgery on the male genitalia
- History of recent or repeat urinary tract or male genitalia infections

#### **Shaving**

Your urologist will tell you what area to shave before your surgery. In general, you should shave your penis and scrotum the night before or the morning of your vasectomy. Electric razors, hair removers and aftershave should not be used on the scrotum. After shaving, take a bath. Remove any loose hairs from the area.

#### **Athletic Supporter**

Bring a suitable size athletic supporter to wear after the surgery.

#### **Consent Form**

Both the patient and his spouse must sign a consent form for the surgery in front of a witness before the procedure.

#### Meal

Before a vasectomy, you may have a light snack or drink. Avoid heavy food or meals prior to surgery.

#### **Travel**

Have someone available to drive you home after the procedure.

## **VASECTOMY SURGERY**

When you come to Phelps Health for your vasectomy, try to relax. Otherwise, the muscles in the scrotum can tense, which can cause the testicles to retract toward the abdomen. This muscle tension can make it difficult for the urologist to grasp the vas deferens. You will be asked to lie down on the procedure table. An antibacterial solution will be placed on the scrotum to reduce skin bacteria.

Sterile towels will be placed around the incision area in the upper or mid-scrotum, where the vas deferens are closest to the skin. Local anesthesia will be injected with a fine needle. You may notice a slight stinging feeling. General anesthesia may be needed in some cases.

After the skin is numb, the urologist will make a small incision. The vas deferens will be separated from the surrounding tissue. Despite local anesthesia being used, you may feel a tug or pulling in the scrotum or groin during the procedure. The vas deferens will be split, and a segment will be removed. The ends of the vas deferens will be sealed. Small bleeding vessels will either be tied together or cauterized (burned and closed off).

The separated vas deferens then will be placed back in the scrotum. The edges of the skin will be allowed to touch and heal by themselves. The urologist also may use a suture material on the skin edges. This material will dissolve in about a week. A small dressing will be applied to the incision to absorb any discharge and to protect the patient's clothes from possible leakage.

Depending on the circumstances, a vasectomy procedure can take anywhere from 30 minutes to one hour.

## AFTER YOUR VASECTOMY

## Dressing

 You may use small, sterile gauze squares for dressing over the incision. You should change any dressing that becomes stained or soiled. The dressing can be removed when dry and there are no stains, which usually happens after a day or two.

## Athletic Supporter

 Wear an athletic supporter to reduce discomfort and to make sure the scrotum does not move. Wear the supporter for as long as comfortable.

## Bathing

 You may take a bath or shower the day after your vasectomy. Pat dry the scrotum instead of rubbing it with a towel.

#### Healing

 The small incision will heal with a slight scar. Most incisions will become hard to see.

## Skin Separation

 In some cases, the skin may separate due to tissue fluid or blood, or if the skin suture comes undone. If this happens, the edges of the skin can be pinched together with sterile gauze and your fingers, and the skin will heal.

## Bruising

 If you notice a black and blue discoloration, this is common because small blood vessels in the skin may bleed. There is typically no discomfort associated with bruising, and the discoloration usually disappears in about a week.

## Swelling

 You may notice some swelling around the incision after a vasectomy. This swelling typically goes away within a week.

#### **Pain**

You may notice a mild feeling of discomfort after the local anesthesia wears off in a few hours after the surgery. The level of pain is different for each patient. You may take pain medicine every four hours or place shaved ice in a plastic bag over the athletic supporter and dressing to help provide relief.

#### Skin Suture

The suture material, if used, will dissolve within a couple of weeks and will not need to be removed. If no sutures are used, the skin will stick together and heal.

## **Physical Activity**

Rest is recommended on the day of your procedure. You can resume most usual daily activities the day after a vasectomy. Try to avoid vigorous, physical activities for four to five days after the operation.

#### Sexual Activities

You may resume sexual activity after a week when the swelling and tenderness of the scrotum starts to go away. You may notice a dull ache in the testicles after the first few ejaculations, but this will diminish over time.

Please note: Live sperm will still exist in the vas deferens, seminal vesicle and ejaculatory ducts. **Birth control precautions will be necessary until all of the remaining sperm is eliminated.** Semen samples should be checked for several weeks after a vasectomy to make sure that sperm are no longer in the semen.

Generally, 15 to 20 ejaculations and two consecutive sperm counts a few weeks apart without any dead or live sperm are required to be considered sterile. Another sperm count is recommended at six months after a vasectomy. Until your provider tells you otherwise, you should consider yourself fertile (able to produce a child).

## **COMPLICATIONS**

Complications from vasectomies are often few and minor, but you should be aware of the following issues that may occur after a vasectomy.

## **Bleeding**

After vasectomies, some men may experience superficial (at the surface) or deep bleeding. Bleeding from the skin edges or just under the skin is normal and usually stops within a few hours. If the skin edges continue to bleed, you can pinch the bleeding tissue with gauze or apply pressure to the area to stop the bleeding.

Sometimes, the scrotum's loose elastic tissue can cause bleeding to increase quickly. Thickened tissue or a knot may form to stop the bleeding. This thick tissue will eventually soften and go away. While uncommon, if the bleeding does not stop, please call your urologist. The incision may need to be opened again, and the vessel causing the bleeding may need to be tied.

#### **Inflammation**

When the vas deferens are separated, germs may be released. Despite cleaning the area and using an antibacterial solution, there still may be some germs, which can lead to inflammation of the genital area. Inflammation can occur in deeper scrotal tissue, the vas deferens, testes and epididymis.

The degree of inflammation ranges from mild redness, swelling and soreness to discharge draining from the incision or from the growth of an abscess (collection of pus). The abscess may need to be drained in some cases. Warm soaks in a bath, anti-inflammatory medicine and antibiotics may help. Rare occurrences of serious infections that result in fever and chills have been reported.

#### **Sperm Granuloma**

If sperm leaks from the vas deferens during or after a vasectomy, it can cause a sperm granuloma, when the fibrous tissue at the end of the vas deferens thickens. Most times, this thickening is small, but some patients may experience knot sensitivity, an ache in the scrotum or discomfort in the groin. If both ends of the vas deferens are connected by a sperm granuloma, then living sperm could show up in the semen and result in fertility.

Please talk to your urologist if a sperm granuloma develops, causes symptoms or becomes larger. Occasionally, the sperm granuloma will need to be removed, and another vasectomy is needed.

#### Vasectomy Failure

While rare, another vasectomy may be needed if dead or live sperm continue to be found in the semen samples following the first vasectomy, or if sperm are found after a period of being sterile.

#### **Discomfort**

Chronic pain in the scrotum is common after a vasectomy. The pain may be due to nerves being irritated.

While certain complications may be unavoidable with a vasectomy, as with any surgery, the key to having a successful procedure is recognizing when these issues occur and correcting them as soon as possible.

Talk to your urologist or care team if you have any concerns or questions after your vasectomy.

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