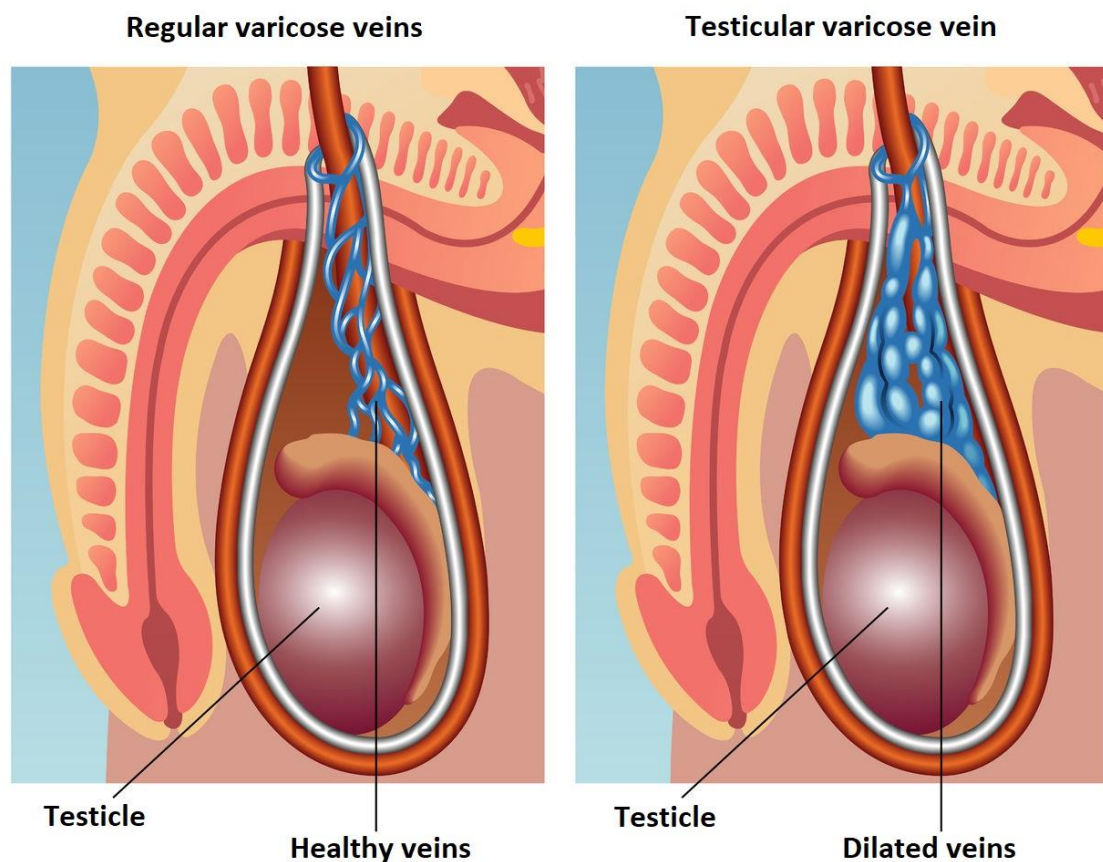


Varicocele:

Diagnosis

Your health care provider can diagnose a varicocele by visual inspection of the scrotum and by touch. You'll likely be examined while lying down and standing up.

When you're standing, your health care provider may ask you to take a deep breath, hold it and bear down, similar to the pressure during a bowel movement. This technique (Valsalva maneuver) can make a varicocele easier to examine.



Imaging test

Your health care provider may want you to have an ultrasound exam. Ultrasound uses high-frequency sound waves to create images of structures inside your body. These images may be used to:

- Confirm the diagnosis or characterize the varicocele

- Eliminate another condition as a possible cause of signs or symptoms
- Detect a lesion or other factor obstructing blood flow

Treatment

A varicocele often doesn't need to be treated. For a man experiencing infertility, surgery to correct the varicocele may be a part of the fertility treatment plan.

For teenagers or young adults — generally those not seeking fertility treatment — a health care provider may suggest annual checkups to monitor any changes. Surgery might be recommended in the following situations:

- A testicle that shows delayed development
- Low sperm count or other sperm irregularities (usually only tested in adults)
- Chronic pain not managed by pain medication

Surgery

The purpose of surgery is to seal off the affected vein to redirect the blood flow into healthy veins. This is possible because two other artery-and-vein systems supply blood circulation to and from the scrotum.

Treatment outcomes may include the following:

- The affected testicle eventually may return to its expected size. In the case of a teenager, the testicle may "catch up" in development.
- Sperm counts may improve, and sperm irregularities may be corrected.
- Surgery may improve fertility or improve semen quality for in vitro fertilization.

Risks of surgery

Varicocele repair presents relatively few risks, which might include:

- Buildup of fluid around the testicles (hydrocele)
- Recurrence of varicoceles
- Infection
- Damage to an artery
- Chronic testicular pain
- Collection of blood around the testicle (hematoma)

The balance between the benefits and risks of surgery shifts if the treatment is only for pain management. While varicoceles may cause pain, most do not. A person with a varicocele may have testicular pain, but the pain may be caused by something else — an unknown or not yet identified cause. When varicocele surgery is done primarily to treat pain, there is a risk that the pain may worsen, or the nature of the pain may change.

Surgical procedures

Your surgeon can stop the flow of blood through the testicular vein by stitching or clipping the vein shut (ligation). Two approaches are commonly used today. Both require general anesthesia and are outpatient procedures that usually allow you to go home the same day. The procedures include:

- **Microscopic varicocelectomy.** The surgeon makes a tiny incision low in the groin. Using a powerful microscope, the surgeon identifies and ligates several small veins. The procedure usually lasts 2 to 3 hours.
- **Laparoscopic varicocelectomy.** The surgeon performs the procedure using a video camera and surgical tools attached to tubes that pass through a few very small incisions in the lower abdomen. Because the network of veins are less complex above the groin, there are fewer veins to ligate. The procedure usually last 30 to 40 minutes.

Recovery

Pain from this surgery generally is mild but might continue for several days or weeks. Your doctor might prescribe pain medication for a limited period after surgery. After that, your doctor might advise you to take nonprescription pain medicine, such as acetaminophen (Tylenol, others) or ibuprofen (Advil, Motrin IB, others) to relieve discomfort.

You'll likely be able to return to work about a week after surgery and resume exercise about two weeks after surgery. Ask your surgeon about when you can safely return to daily activities or when you can have sex.

General Care after Varicocele Surgery

In the following, we mentioned some of the general care after varicocele surgery:

- You will be discharged on the day of the surgery. Doctors may recommend asking someone to be your caregiver in the hospital for a couple of hours;
- Take painkillers and antibiotics as prescribed;
- Use a protective sac to protect the testicles;
- Avoid lifting after varicocele surgery;
- Use an ice pack to prevent swelling;
- About six hours after the operation, you can have drinks;
- You should limit your movement in the first 24 hours after surgery;
- Avoid strenuous activities for the first two weeks after the surgery; and
- After two or three weeks, you can exercise but not in a way that causes varicocele recurrence.