

Varicocele and Varicocelectomy

What is a varicocele?

A varicocele is swelling in the scrotal area caused by stretched or dialed veins next to the testicle. It is sometimes referred to as a "bag of worms" or a "bunch of grapes."

What causes varicocele?

The spermatic cord is a structure that contains arteries, veins, nerves, and tubes. It provides a connection and circulates blood to and from the testicle.

Normally, blood flows to the testicles through an artery, and flows out through a network of tiny veins. Those veins then drain into a larger vein that goes up to the abdomen. Valves help regulate the blood flow. Valves that are not working correctly lead to back pressure in the system and cause the blood to pool. This creates swelling and stretching of the veins around the testicle, resulting in a varicocele.

It is more common to have a varicocele on the left side than the right. This is due to the mechanism of the blood flow system in the body being larger on the left.

What are the symptoms of varicocele?

A varicocele is typically soft to touch, and there may be a bluish tint to the skin. Some patients complain of a feeling of fullness or achiness in the area. A varicocele typically does not cause discomfort or pain. There may be a size difference between the testicles.

Varicoceles have been divided into 3 classifications based upon physical examination:

Grade I: Only felt when patient bears down.

Grade II: Can be felt but not seen.

Grade III: Large enough to be seen.

How is varicocele diagnosed?

The provider will do a physical exam both standing up and laying down. This helps assess for any changes while the scrotum is relaxed.

A scrotal ultrasound may be ordered to evaluate the side of each testicle, along with measuring blood flow to the testicles.



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How is a varicocele treated?

Most varicoceles need no special treatment. For adolescents, a left testis 25% smaller than the right testis is considered significant, and treatment may be recommended. Other indication for repair includes large testis size or discomfort. For an adult male, a varicocele should be corrected if there are semen abnormalities and issues of infertility. The size of the varicocele may correlate with semen quality and testis growth.

What are the treatments for a varicocele?

Anti-inflammatory medications may be recommended. If the varicocele causes discomfort, wearing snug fitting underwear or a jock strap for support may bring relief.

If there is pain or any indication that the growth of the testicle is affected by the varicocele, surgery intervention may be recommended.

Risks include recurrence of the varicocele and hydrocele (fluid around the testicle.)

What happens in surgery?

There are multiple surgical techniques for correcting a varicocele. An alternative procedure in the interventional radiology department may be recommended. Your surgeon will discuss with you the best technique for your child.

All procedures are done on an outpatient basis, your child will go home the same day. General anesthesia is needed if completed in the operating room.

Will my child be in pain?

Most children do well with the surgery. If your child is in pain, pain medicine can help. You may alternate Acetaminophen (Tylenol® or another brand) and Ibuprofen (Advil® or Motrin®). Do not give aspirin because it may cause bleeding. Always follow your surgeons' specific instructions on any prescription pain medications.

What can I expect after the surgery?

Before your child is discharged you will be given written information about their care at home and any questions you have will be answered.

- Diet: Resume regular diet as tolerated
- Activity: Your child may return to school when pain is well controlled. Avoid straddling activities, contact sports and swimming for 14 days.
- Wound care: Expect swelling, bruising and redness of the scrotum and groin. Minor bleeding or spotting at incisions is not unusual. Your surgeon will explain any dressing cares. Wearing snug fitting underwear or a jock strap may bring relief. Taking breaks during the day and elevating the scrotum may also provide relief. Ice or cold pack to scrotum as tolerated.



- **Bathing:** It is ok to take a bath 24 hours after procedure. Bathe (5-10 minutes) in plain water for the next 7 days. A daily warm bath will help the healing and provide comfort.
- **Medicines:** You may alternate Acetaminophen (Tylenol® or another brand) and Ibuprofen (such as Advil® or Motrin®). Do not give aspirin because it may cause bleeding. Always follow your surgeons' specific instructions on any prescription pain medications.

What to call the surgeon for:

- Fever with redness or drainage at surgical site
- Significant swelling, bruising, or bleeding at surgical area
- If the wound separates
- Call your primary care doctor for any other concerns.

Follow-up care: Follow-up with your child's surgeon as directed following the surgery. Call your surgeon's office to schedule an appointment.

Questions? This information is not specific to your child but provides general information. If you have any concerns, please call us at 612-813-8000.

Testicular Self-Exam

Doing a self-testicular exam is part of taking loving care of your health. Fine motor skills, fingertip sensation and good thinking/reasoning skills are needed. If you feel you struggle with any of these skills, your caregiver should help you with the exam.

- 1. Testicular exams should be performed once a month.
- 2. After a warm shower or bath is the best time to check your testicles. Heat helps your scrotum relax and makes it easier to feel the testicles.
- 3. Hold each testicle between your thumb and fingers gently feel the top, bottom, front and back for any new bumps, hard spots, or anything new. You should feel the epididymis (feels like a tube) along the top and back of each testicle; this is normal.
- 4. Repeat on the other side.
- 5. Lastly, put the two testicles side-by-side and inspect them. They should be identical in size and shape.

Call your primary health care provider if you notice any of the following:

- 1. Hard lump on testicle
- 2. One testicle feels bigger than the other
- 3. Testicles feel heavy or different
- 4. Pain or swelling in scrotum
- 5. Dull ache in your groin or lower abdomen