



Testicular Torsion

Patient and family information, brought to you by the Education Committee of APSA

Overview - “What is it?”

A young male’s testicle hangs from a cord called the “spermatic cord”. This is the cord that brings blood and other important structures to the testicle. (See Figure 1)

Testicular torsion is when the testicle rotates and twists the spermatic cord. When this happens, the blood flow is pinched off and unable to get to the testicle, causing severe pain and swelling. (See Figure 1).

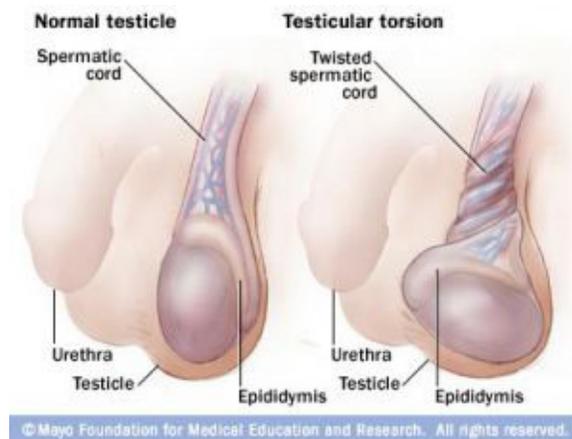


Figure 1: Spermatic cord with testicular Torsion

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Testicular torsion can happen in all ages, but usually happens in boys ages 12-16 (about 65% of all testicular torsion) or as a young baby (also called neonatal torsion).

Usually, the testicle is held in place by surrounding tissue, but some boys don’t have enough anchoring tissue, allowing the testicle to move freely and twist within the scrotum.

Testicular torsion can also be caused by an injury to the scrotum, commonly occurring during sports or activity. Testicular torsion is a SURGICAL EMERGENCY and you must seek medical help as soon as possible.

Signs and Symptoms - “What symptoms will my child have?”

The most common symptom of testicular torsion is sudden, severe testicular/scrotal pain. This pain can often wake boys from sleep in the middle of the night.

Other signs and symptoms include

- Abdominal pain
- Nausea and vomiting
- Swelling of the scrotum
- Redness of the scrotum
- Pain in the groin
- Pain while urinating
- A testicle that sits higher or in a different position than usual

Diagnosis - “What tests are done to find out what my child has?”

Physical Exam: Usually, the diagnosis is made based on the child’s medical history and physical exam done by an experienced doctor.

Scrotal ultrasound: Ultrasound uses sound waves to create images and pictures. It is particularly good at looking at blood flow. This is a test that does not cause pain or emit radiation. It involves using a wand to check the blood flow to the testicles.

Lab Tests: Urine and blood tests may be done to make sure that there is not another reason for the child’s pain.

Treatment - “What will be done to make my child better?”

Surgery: The treatment for testicular torsion is surgery to *detorse* (untwist) the testicle. It is important that a surgeon evaluates the child, as surgery must be done as quickly as possible to prevent loss of the testicle.

Manual correction: The doctor may be able to temporarily untwist the testicle to allow some blood to flow in and out of the testicle before surgery. Nevertheless, this is a surgical emergency.

TIME IS KEY! The testicle must be detorsed (untwisted) with surgery as soon as possible.

- If detorsed within *4-6 hours* after the start of symptoms = 98% chance of saving the testicle
- If detorsed within *12 hours* after the start of symptoms = 20% chance of saving the testicle
- If detorsed *24 hours* or more after the start of symptoms = 0% chance of saving the testicle.

In some rare cases, the testicle may have gone too long without blood flow and may need to be removed (also called orchiectomy).

During the surgery, the surgeon will check the other testicle and fix it to the scrotum if necessary to prevent future torsion.

Home Care - “What do I need to do once my child goes home?”

Your child’s care at home will vary depending on the hospital, doctor and the child’s unique case. It is important to remember to follow all of the discharge instructions given to you when leaving the hospital. The following are general guidelines for your discharge.

Diet: Normal diet for age.

Wound care: Surgical incisions should be kept clean and dry for a few days after surgery. Most of the time, the stitches used in children are absorbable and do not require removal. Your surgeon will give you specific guidance regarding wound care, including when your child can shower or bathe. Usually, wounds are kept dry for 3-5 days, then can be washed gently with soap and water.

Medicines: Medicines for pain such as acetaminophen (Tylenol®) or ibuprofen (Motrin® or Advil®) or something stronger like a narcotic may be needed to help with pain for a few days after surgery. Stool softeners and laxatives are needed to help regular stooling after surgery, especially if narcotics are still needed for pain.

When to call a doctor: Call your doctor for worsening belly pain, fever, vomiting, diarrhea, problems with urination, or if the wounds are red or draining fluid.

Follow-up care: Your child should follow up with his surgeon 2-3 weeks after surgery to ensure proper postoperative healing.

Long Term Outcomes - “Are there future conditions to worry about?”

If one testicle has to be removed, the boy will still be able to make hormones (testosterone) due to the presence of the other testicle and will still be able to have children in the future.

A testicular implant may be surgically placed for cosmetic appearance during the initial surgery or in the future. Your surgeon will discuss this option with you if an orchiectomy is required.

The prognosis is overall good with excellent fertility function if the testicle is successfully saved.

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