

Pediatric Urology Associates, Ltd.

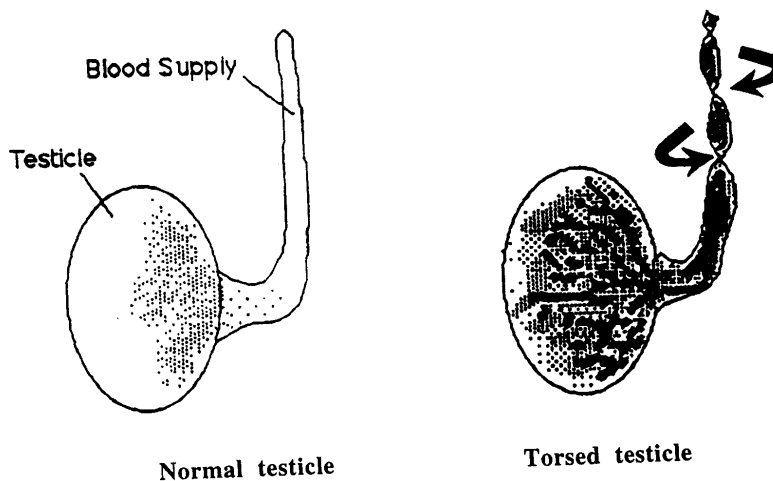
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TORSION OF THE TESTICLE

Torsion of the testicle is the most common pediatric urologic emergency. This usually happens because the sheath of blood vessels that supply the testicle becomes twisted or torted. In the fetus the testicle develops with the abdomen and migrates into the scrotum. Trailing behind it like a leash is its blood supply. In the scrotum the testicle resides within a smooth sack called the tunica vaginalis. The testicle can spin and move about within the sack. The twisting or torsion blocks the blood vessels which supply the testicle with oxygen and other nutrients. When torsion has occurred and is unrelieved the testicle can die.



Sudden scrotal pain is the most common symptom. This pain is due to ischemia or lack of blood flow. This is similar to the chest pain that occurs when a patient has a heart attack. The pain is usually on one side, but it can spread and be felt in the groin, abdomen, and flank. About one in four will have nausea and vomiting. The pain can come during activity, such as sports, or after minor accidents. It can come on at rest or even during sleep. Children, particularly teenage boys, are often reluctant to report testicular or scrotal pain. Hours and sometimes days can pass before they are seen by a physician. The diagnosis of torsion can be difficult to make. Other illnesses can appear like torsion. But because torsion if left untreated will lead to the loss of the testicle, any acute scrotal pain is treated as a torsion until proven otherwise.

When testicles have been torsed they can sustain injury. The key factor is the length of time that the blood supply is occluded. Torsion relieved within six hours or less usually results in no lasting effects. After six hours the risk of damage increases. These injuries can cause decreased sperm production and fertility.

The only treatment of testicular torsion is immediate detorsion and fixation of the testicle to the scrotal wall. Occasionally it is possible to manually untwist the testicle, but the safest and surest course of action is surgical exploration. The child is put under general anesthesia and a small incision is made through the scrotum. The testicle is examined under direct vision. After the testis is untwisted, it is observed. If the testicle has already died it is removed. If it looks normal and healthy, it is securely sewn to the scrotal wall to prevent any further twisting. When torsion is found on one side the other testicle is also explored and secured to the scrotal wall with sutures. Experience has shown that if one testicle can twist the other one can as well. The surgery usually takes about one hour to perform and most children are able to go home afterwards.

Intermittent Torsion

Some boys and men will present with intermittent pain of the testicle. This can last for several minutes or a few seconds. This pain may be related to intermittent torsion of the testis. Due to the start time and span of symptoms, the findings have often resolved by the time the patient presents to the physician. If the history is typical of torsion, the patient may be scheduled for elective fixation of the testis. This is necessary to prevent an episode of torsion which will not spontaneously resolve leading to testicular damage.