



Undescended Testicle (cryptorchidism)

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

Overview - “What is it?”

Before birth, a male infant’s testicles actually are located within the abdomen (belly). Under the influence of a number of different hormones, the testicles descend into the scrotum just before birth. (See Figure 1)

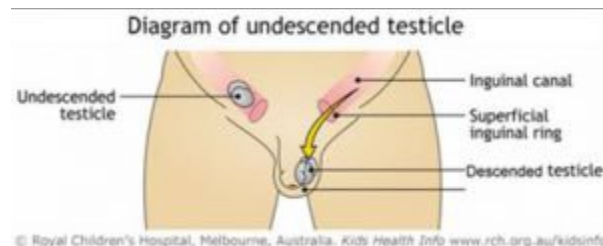


Figure 1: Undescended Testicle

(Image Courtesy of Royal Children’s Hospital, Melbourne, Australia)

Occasionally, the testicle fails to move completely into the scrotum by the time the baby is born. The testicle remains somewhere in the belly or in the groin area. This condition is called an *undescended testicle* or cryptorchidism which means “hidden testicle”. (See Figure 2)

- It occurs commonly in preterm males (born before 37 week gestational age) because there is not enough time for the testicle to make its way into the scrotum before birth.
- An undescended testicle occurs in up to 3% of full-term boys and in up to 45% of premature or low birthweight (<2.5 kg) boys.

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

Typically, an undescended testicle is noted at birth as an absence of the testicle within the scrotum. It can occur on one or both sides.

The testicle may be felt in the groin area and present as a groin bulge.

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

Physical exam: The diagnosis of this condition is usually confirmed by physical exam performed by a physician or nurse.

Ultrasound: is performed by physicians to evaluate for the presence of a testicle, however this is not considered necessary by most pediatric surgeons and urologists.

Conditions that mimic an undescended testicle: include an absent testicle (the testicle did not develop), *ectopic testicle* (the testicle is somewhere abnormal outside the normal path of descent), or *retractile testicle* (a testicle that is pulled above the scrotum by a hyperactive reflex). This can be usually differentiated based on physical exam with or without an ultrasound.

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

Observation: Occasionally, the testicle will descend on its own without any medical therapy. If it does occur, it is most likely to happen by 6 months – 1 year of age. After that, studies have shown that the testicle is unlikely to descend without surgery.

Surgery: The best treatment for an undescended testicle is a surgical procedure to bring the testicle into the scrotum. This is called an “orchiopexy” or “orchidopexy”.

- The timing of surgery varies between 6-12 months of age. Your surgeon will recommend the ideal time for surgery.
- If the doctor can feel the testicle in the groin, then an incision is made in the groin and the testicle is freed and brought down into the scrotum. A separate incision is often made in the scrotum in order to place “anchoring sutures” that will hold the testicle in place within the scrotum.
- If the testicle cannot be felt, then a camera may be inserted through a small incision through the abdomen (called laparoscopy) in order to find its location before proceeding with the rest of the surgery. If it is difficult to get the testicle from the belly to the scrotum, it may take two surgeries to get the testicle into the right spot. The first stage is usually the laparoscopic finding of the testicle and clipping the blood vessels. It is the blood vessels that are foreshortened. The testicle is left in the body for at least six months so the testicle can establish other means of blood supply before getting the testicle into the scrotum.

Risks: Other risks of surgery include bleeding, infection, pain, damage to surrounding structures, recurrent undescended testicle and side effects of anesthesia. These are rare, and the procedure is generally well tolerated.

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

Instructions after discharge can vary based on the institution or the surgeon, age of the child, and complexity of the surgery; however, some general principles remain the same.

Diet: The child should be on a normal diet after discharge.

Activity: They should refrain from physical activity as much as possible for at least two weeks.

Wound care: The incisions should not be soaked in a tub or pool for one week.

Medicine: Your child will likely be given pain medications to home with as well; these should be administered according to the doctor’s prescription.

When should you call the doctor:

- Fever greater than 38.5 C or 101.5F
- Pus draining from incision
- Increased redness around the incision
- Increased tenderness of the incision
- Inconsolability with food/drink/pain medications
- Decreased urination from usual
- Return of the groin bulge

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

In general, the risk of the injury to the testicle is less than 1%.

It is important to make sure that the testicle remains in the scrotum as the child gets bigger. This should be checked annually during the well child check.

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