Pediatric Undescended Testicle (Cryptorchidism): Definitions, Diagnosis and Treatment
What is Cryptorchidism?

Undescended testicles (UDTs), also called cryptorchidism, occur in 3% of term and up to 33% of preterm boys. An UDT has not completed its expected path of descent from an intra-abdominal location to the dependent scrotum. Between 55-66% of testicles initially palpated in the groin will descend to the scrotum in the first few months of life, but they rarely continue to descend after 6 months age (corrected for gestational age).

A nonpalpable testicle on exam could represent various clinical scenarios

1. Testicular agenesis – testicle never present
2. Vanishing testicle – testicular loss due to vascular compromise
3. Intra-abdominal testicle – intra-abdominal location of normal or atrophic testicle
4. Inguinal testicle of small size or with difficult exam – inguinal testicles can often be misdiagnosed as nonpalpable due to small size or patient noncompliance during exam and/or large fat pad overlying testicle
Retractile Testicles

Retractile testicles represent normal male development and, unlike true cryptorchidism, are not associated with any long-term malignancy or fertility concerns.

Symptoms and Diagnosis

- Usually painless, however the rare patient may report discomfort when the testicle ascends. Surgical correction may improve that discomfort
- Diagnosed by the brisk retraction of the testicle from a dependent scrotal position to the inguinal canal due to the cremasteric muscle reflex
- Differentiated from a true cryptorchid testicle by the ability to manipulate the testicle back to a dependent scrotal position in the absence of persistent upward pulling tension
- Ultrasound is never indicated to make the diagnosis of retractile testicles, as they will often retract into the inguinal canal at the time of ultrasound gel application

Treatment

No treatment is indicated for the vast majority of retractile testicles, unless the patient describes pain with retraction or the patient is approaching pubertal years without any improvement.

Despite the benign nature of retractile testicles, testicular ascent into a cryptorchid position can occur. Thus, all patients should undergo at least yearly primary care provider exams where both testicles should be documented in the scrotum and families (patient, when age appropriate) should be instructed to look and feel for the testicles while the child is in a relaxed warm environment like the bath. Concern for testicular ascent should prompt a referral to a urologist.
Referrals and Consultations

Online: NationwideChildrens.org/Urology
Email: Urology_Specialty_Scheduling@NationwideChildrens.org
Appointment Line: (614) 722-6200 | For Urgent Appointments or Complex Issues: (614) 722-3115
Physician Direct Connect Line for 24-hour urgent physician consultations: (614) 355-0221 or (877) 355-0221