

Absence of canalicular undescended testis during follow-up; where should be examined by ultrasound?

Sir,

Undescended testis (UDT), also known as cryptorchidism, is the most common congenital genitourinary anomaly of male infants.^[1] This condition refers to a testis that is located somewhere along the normal pathway of testicular descent from the level of the inferior pole of the kidney to the suprascrotal position. Any other maldescent of a testis outside of its pathway is known as testicular ectopia. An ectopic testis may be located at various sites including the superficial inguinal pouch, anterior abdominal wall, femoral canal, perineum, prepenile region, and contralateral hemiscrotum.^[1,2]

Undescended testis is usually diagnosed by physical examination in first postnatal visits. Imaging tools have been hired for investigating the viability of a UDT and in the cases with nonpalpable testis. Ultrasound as a safe, available, and low-cost modality used as a first line of imaging for UDT.^[3,4] Despite controversial impressions about its accuracy in detecting nonpalpable testis,^[5] ultrasound has been authenticated as a reliable tool for identifying UDT within the inguinal canal (canalicular UDT).^[3] Traditionally, when the diagnosis of UDT is established in a neonate, a follow-up program will be offered by the urologist for probable testicular descending during 1st year of infancy.^[1]

In our practice, in the imaging center of Emam Hossein Pediatric Hospital, we have occasionally encountered infants with previously confirmed canalicular UDT (clinically and by ultrasound) which are referred by the urologists as their UDT have become nonpalpable during the follow-up.

Ultrasound study in these challenging cases requires identifying the probable locations of both undescending and ectopic testis. After scanning the scrotum and inguinal canal, we directly put the linear probe on the lower part of anterior abdominal wall along paramidline for detecting testis between rectus sheath and superior/ anterior wall of the urinary bladder. We have evaluated at least 20 cases with this approach, and the above-

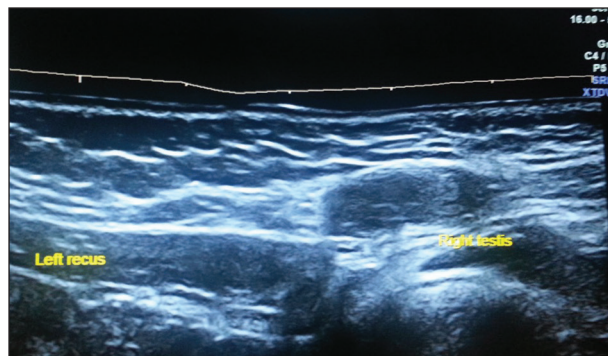


Figure 1: Ultrasound study showed right testis adjacent to the rectus sheath in the left side

mentioned area has been the location of “absent canalicular UDT” in nearly all of our cases till now.

Figure 1 is an ultrasound image of a 9-month-old infant with previous canalicular testis which was detected 6 months before with ultrasound. This ultrasound which was done for detecting right nonpalpable testis showed a viable superficial testis adjacent to the rectus sheath in the left side. Following surgical intervention confirmed our diagnosis.

The etiology of this event is unknown. In fact, a canalicular UDT ascends during the interval which is expected for its descend.

This issue requires larger studies. This experience facilitates the detection of secondary nonpalpable testis and makes a good guide for surgical intervention.

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