

Intrauterine, acquired undescended testes: a newly identified phenomenon during late fetal development life (EP05.91)

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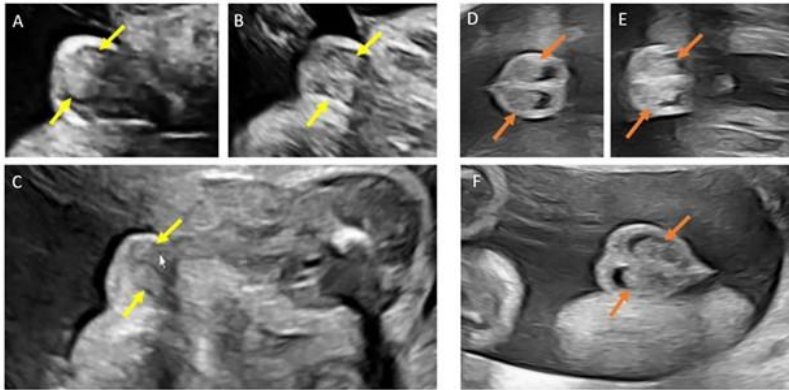
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Cryptorchidism, also known as undescended testis (UDT), is a common condition where a testis fails to descend into the scrotum. It affects 1% to 3% of full-term newborns. Acquired undescended testis (A-UDT) involves the displacement of a previously descended testis, confirmed by documented normal postnatal descent. Recent reports indicate that AUDT may occur as often as congenital UDT in patients undergoing surgery for cryptorchidism. The present report is the first to diagnose **intrauterine-acquired undescended testis (IU-AUDT)**

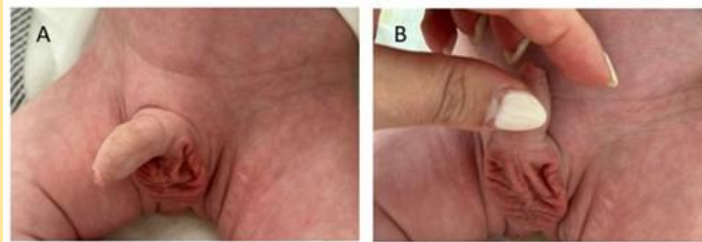
A 32-year-old primigravid woman had a US at 29.2 weeks' gestation. Normal external male genitalia with both testes in the scrotum were observed, with no other fetal anomalies. The fetal Chromosomal Microarray Analysis (CMA) via amniocentesis was normal, indicating a 46, XY fetus.

At 40.4 weeks, a healthy neonate was born vaginally, weighing 3,790 grams. The postnatal physical exam showed normal penile and scrotal anatomy; however, both testes were non-palpable. US examinations on the first day of life showed no testes in the scrotum or inguinal canal. Normal levels of Inhibin B, FSH, LH, and Testosterone indicated proper testicular function and ruled out anorchia.

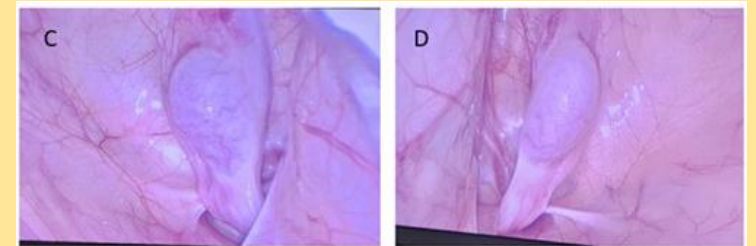
At 9 months old, laparoscopy showed bilateral intra-abdominal testes that appeared normal, located in the lower abdomen, with short spermatic vessels. A tension-free orchiopexy was performed on the left side in a single-stage procedure. On the right side, due to short spermatic vessels, the first stage of the Fowler-Stephens procedure was performed, followed by a second stage of scrotal orchiopexy seven months later without complications.



The US scan at 29 weeks in the present case, from different demonstration positions, showed two testicles located inside the scrotum (A-C, yellow arrows), and a normal control case from the same week showed a similar picture of two testicles in the scrotum (D-F, orange arrows).



Images from the first day of life of the current case show an empty scrotum (A, B).



The laparoscopic examination at 9 months of age in the current case shows an intra-abdominal undescended testis (C, D).

The present case is the first to highlight the phenomenon of antenatal sonographic identification of descended testicles in the scrotum, which were undescended at birth. This supports the diagnosis of **intrauterine-acquired undescended testis (IU-AUDT)** - a phenomenon not yet documented in the literature. Therefore, it is important to recognize that demonstrating testes in the scrotum during fetal life does not guarantee that UDT will not develop until birth.