A Rare Case Report of Undescended Testis: Both on One Side

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ABSTRACT

Undescended Testis is a medical term that uses for any testis which is not in its normal place (bottom of the scrotum). UDT can be classified as unilateral and bilateral. Unilateral UDT is more common than bilateral UDT. There is a very rare condition in which both testicles are on the same side and have not descended.

We report in this article a 3 years old boy by a chief complaint of bilateral testicular mass absence. Diagnostic evaluation has been done but testes was abcent in scrota. Exploring laparoscopy has been done and rare cases of UDT diagnosed, in which both testicles was on left side of the pelvis by two separate spermatic cord. The shorter spermatic cord fixed in the left scrotum and the longer one fixed on the right side. The testis was normal in follow up examinations.

INTRODUCTION

The Normal location of the testis is in the bottom of the scrotum. Undescended Testis (UDT), Cryptorchidism, retention testis and male descending testis are some medical terms that use for any testis which are not in its normal place. UDT is a common male genitalia anomaly by an incidence of 1-3% in term neonates and 30% in preterm neonate. UDT pathophysiology is not understood completely but variable genetic and hormonal factors have been suggeste. An important complication of UDT is testicular malfunction especially in spermatogenesis and testicular cancer. UDT is categorized base on congenital or acquired, palpability, unilateral or bilateral. UDT can be classified as unilateral and bilateral. Unilateral UDT is more common than bilateral UDT by a rate of 4:1. There is a very rare condition in which both testicles are on the same side and have not descended. We report in this article one of these rare cases, in which both testicles were on one side of the pelvis while not descended. Based on our searches on MEDLINE, and PubMed and GoogleScholar just one somewhat similar case reported by Ebrahimi in 2010.

CASE REPORT

3 years old boy presented to our surgery clinic by a chief complaint of testicular mass absence. He admitted for more diagnostic evaluation and therapeutic management. Patients mother has no drug history or X-ray radiation during pregnancy. She had another boy without any medical problem. Parents were not relatives. There was no allergic or drug history. In physical examination, he had no testis in both scrota and they were not palpable. Another part of the physical examination was normal. Ultrasonographic evaluation of abdomen, and pelvic and scrota was done. Radiologist reported bilateral empty scrota and no specific mass in the pelvis. Multiplanar and multisequential Magnetic Resonance Imaging (MRI) of the abdominopelvic area done to get more diagnostic data (Fig-1). Radiologist reported MRI as follow:

- Open left inguinal canal with left testis adjacent to its superficial ring.
- Right testis isn’t seen.
- There is no other specific finding.

In the biochemical evaluation, Complete Blood Count (CBC) and Coagulative parameters were normal. According to case scarcity, anesthesiologist, legal medicine, and cardiologist consultation have been done and all recommendations operated. Then patient prepared for elective surgery. General anesthesia with inhalant drugs operated. Laparoscopic surgery has been done to check for possible testis existence. Entrance site was the left inguinal. No testis found on the right side (Fig-2). After more probing, two separate spermatic cord found on the left side (Fig-3) and both testis were seen after more probing with different maneuvers. The left testis was in the proximal of left inguinal canal and the right one was in the abdomen. The right duct is attached to the right testis and is free inta-abdominaly and the left one attached to the left testis and continued to the proximal of left inguinal canal. Both had arteries and veins separated.

Releasing of testis from the abdominal wall has been done. Unlike the case reported by Ebrahimi in 2010, our case had two separate spermatic cord (Fig-4). After releasing, both testis brought down into the scrotum via left inguinal canal because of the right spermatic cord shortness. The left testis fixed in the left scrotum. The right testis passed from median raphe and fixed in the right scrotum.

The longer spermatic cord belonged to the right scrotum and the shorter one fixed on the left side. In the follow-up visits and Doppler ultrasonography evaluation, testis size and the position was normal and remains viable at weeks 1, 4, and 8 and 16 after the operation.

**CONCLUSION**

UDT is the most common disease in the field of children urology. It is often congenitally but not always.\(^8\) Although UDT is a common condition but Crossed Testicular Ectopia (CTE) is a rare condition.\(^7\) CTE defined by migration of one testis toward the opposite inguinal canal. In CTE, both testes descended through a single inguinal canal and the most common presentation is an ipsilateral inguinal hernia and contralateral cryptorchidism. Always exact diagnosis is made after operation.\(^9\) three different types of CTE defined in the literature as follow: I. Associated with an inguinal hernia alone; II. Associated with persistent Mullerian remnants; III. Associated with other anomalies without Mullerian remnants.\(^7, 9\) we had a very rare case of UDT with CTE with a two separate spermatic cord that both testes fixed into the scrotum and was kept alive successfully.

**REFERENCES**

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*Fig-1:* No testis in the right side of pelvic in laparoscopic view. Arrow shows right inferior epigastric artery
Fig-2: Both spermatic cord on the left side of the pelvis. Both vas deferens inters into the left inguinal canal (Red Arrows). And left testis head is visible in the proximal of canal (Green Arrow).

Fig-3: Two separate spermatic cord of each undescended testis. The green arrow shows the right vas deferens and the red one shows the left vas deferens.