

## Ectopic Testis: A Rare Case

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**Abstract-** Congenital undescending testis is a common anomaly of testis, but we had a rare case of ectopic testis. A 15-month-old infant was operated emergently because of left incarcerated inguinal hernia. Intraoperative exploration of hernial sac revealed two ectopic testes with one spermatic cord proximally but in the middle divided to two spermatic cords in a 8 shape. There was an important point about vas deferens as it was single proximal to the chord, but divided into two in the middle of the chord. Vessels showed a similar condition about. We released both testes and brought down both of them into scrotum. This is a rare case of ectopic testis transectopia with partially common vas and vessels.

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**Key words:** Testis; choristoma; spermatic cord; vas deferens

### Introduction

Congenital undescending testis (UDT) is a common anomaly of testis, but UDT that both testes are in one side of pelvis in hernial sac with a partially common spermatic cord is a rare condition.

### Case Reports

A 15-month-old male infant was brought to emergency ward because of left incarcerated inguinal hernia. In physical examination, he had left incarcerated inguinal hernia. He also had no testis in both scrota. He had a sonographic report of abdomen, pelvis, and scrota before admission. In this report, there was bilateral UDT with no signs of testes in pelvis or inguinal canal. His mother had no history of drug therapy or X-ray exposure during pregnancy. She had another boy (3 year old) with normal testes. In addition, the parents were cousins and did not have any special disease.

He was prepared for emergency operation on incarcerated inguinal hernia. On exploration of the hernial sac on the left side, two ectopic testes were seen with a partially common spermatic cord on the left side in the hernial sac (Figure 1).

There was one spermatic cord proximally, but in the middle of the spermatic cord, it was divided into two

spermatic cords in a ^ shape (Figure 2). The important point about vas deferens is that it was single proximal to the chord, but in the middle of the chord, it was divided into two. Vessels showed a similar condition. After separation of hernia sac from spermatic cord, herniotomy and high ligation of sac were done. There was an elongate cord in this case. Both testes were released and brought down into scrota (Figure 1&2). The left testis was fixed in left scrotum and the right testis transeptally fixed in right scrotum. Both testes had a normal shape and epididymis. Four month following operation, he was in a good condition with viable testes in both scrota according to physical examination and doppler testis ultrasonography.

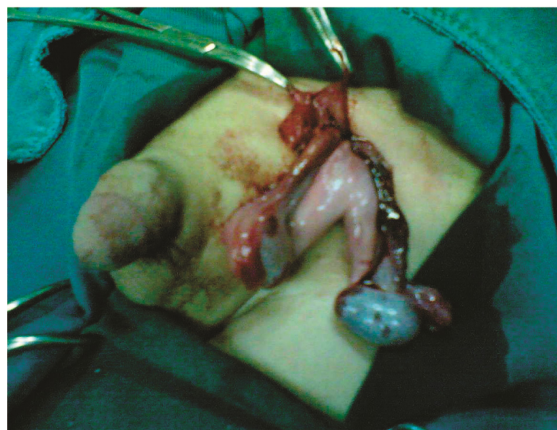


**Figure 1.** Rare testis anomaly with partially divided spermatic cord in left inguinal canal

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**Figure 2.** Intraoperative picture of anomaly. In this picture, common spermatic cord and both testes in left inguinal canal with X shape division of the spermatic cord were seen.

## Discussion

Although isolated cryptorchidism is one of the most congenital anomalies at birth affecting 3% of full-term male newborns, persistent mullerian duct syndrome (PMDS) with transverse testicular ectopia (TTS) is a very rare pathological association often discovered during repair of inguinal hernia or cryptorchidism.

By definition, cryptorchidism is a developmental defect in which there is considerable variation among cryptorchid testis (1). Transverse testicular ectopia is another rare condition of cryptorchidism that includes 65 cases in the western literature (2). Crossed testicular ectopia (CTE) is a rare anomaly characterized by migration of one testis toward the opposite inguinal canal. Usually, the correct diagnosis is not made preoperatively (3). In this anomaly, both testes descend through a single inguinal canal and the typical presentation is that of ipsilateral inguinal hernia and contralateral cryptorchidism (4). Embriology and surgical findings suggest that CTE is a common consequence of many unclear etiologic

factors, especially mechanical ones, and can be associated with mullerian duct persistence. Literature Review suggests a classification of CTE into three types: I. Associated with inguinal hernia alone; II. Associated with persistent mullerian remnants; III. Associated with other anomalies without mullerian remnants. Treatment includes transeptal research for mullerian remnants and other anomalies and longterm postoperative follow up to prevent the risk of becoming malignant (5). In transverse testicular ectopia, correct diagnosis is made intraoperatively in the majority of cases (2). We had very rare cases of testis anomaly with partially common vas and vessels in left inguinal hernial sac. We successfully brought down both testes to the scrota and fixed them separately. Photos and a short video of this rare anomaly of testis (transectopia with partially common vas and vessels) is available.

## References

1. Schneck FX, Dellinger MS. Abnormalities of testis and scrotum and their surgical management. In: Walsh PC, Retik AB, Vaughan ED Jr, Wein AJ, editors. Campbell's Urology. 8<sup>th</sup> ed. Philadelphia: WB Saunders; 2002. p. 2383-94.
2. Zivanović D, Slavković A, Madić J, Novaković D. Transverse testicular ectopia. *Srp Arh Celok Lek* 2004;132(11-12):438-40.
3. Lam WW, Le SD, Chan KL, Chan FL, Tam PK. Transverse testicular ectopia detected by MR imaging and MR venography. *Pediatr Radiol* 2002;32(2):126-9.
4. Hughes DT, Croitoru DP. Case report: Crossed testicular ectopia. *J Pediatr Surg* 2007;42(9):1620-2.
5. Esteves E, Pinus J, Maranhão RF, Abib Sde C, Pinus J. Crossed testicular ectopia. *Sao Paulo Med J* 1995;113(4):935-40.