

Transverse testicular ectopia with left inguinal hernia, a case report

Feray Altun Cetin^{1*}

1 Ozel Baglar Hastanesi Department of Internal Diseases, Baglar, Diyarbakir, TURKEY

Abstract

Transverse testicular ectopia (TTE) also named testicular pseudo duplication, unilateral double testis and transverse aberrant testicular maldescent is a rare but well known congenital anomaly in which both testes descend or migrate through a single inguinal canal or hemiscrotum. Often the diagnosis is made during surgical exploration and patients usually present at a very young age around 1–2 years old [1,2] In the literature more than 100 cases of TTE have been reported. We report a 14 year old Syrian refugee male case who was diagnosed with TTE during assessment of suspicious cryptorchidism and left inguinal hernia.

* Corresponding author: Ozel Baglar Hastanesi, Nukhet Coskun Caddesi, No 87, Baglar, Diyarbakir, TURKEY
Phone: +90 530 489 29 59, Fax : +90 412 233 04 19, E-mail: altun.feray@gmail.com

Case report

A 14 year-old Syrian refugee boy presented with suspicious right sided undescended testis and left inguinal hernia (Fig 1). Sonography revealed no testicle on the right and two testicles on the left hemiscrotum. The patient underwent a contrast enhanced MRI for further preoperative assessment. MRI highlighted the position of the two testes. Both testes were normal in size, shape, and signal intensity and located in left hemiscrotum. (Fig 2). The right hemiscrotum was small and empty. We could see two discrete spermatic cord that were better appreciated on the contrastenhanced T1-weighted images (Fig3). No evidence of any persistent mullerian duct abnormality was detected. The patient was diagnosed with TTE and referred to the urology clinic.

During operation, the left inguinal exploration revealed a normal testis within the left scrotum associated with an indirect inguinal hernia. During dissection, a second testis with a good size was found at the level of the internal ring (Fig 4). Each testes was noted to have its seperated spermatic cord and vasa deferentia. After left inguinal herniotomy, a transseptal orchiopexy was performed.

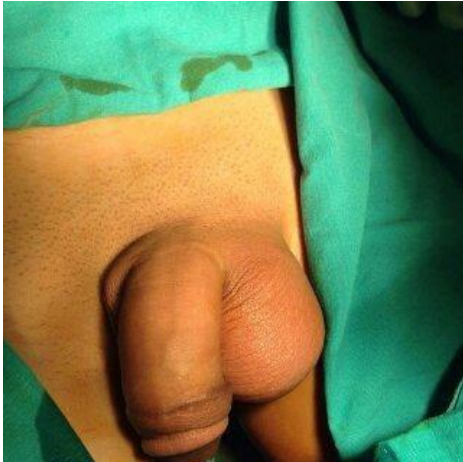


Fig. 1

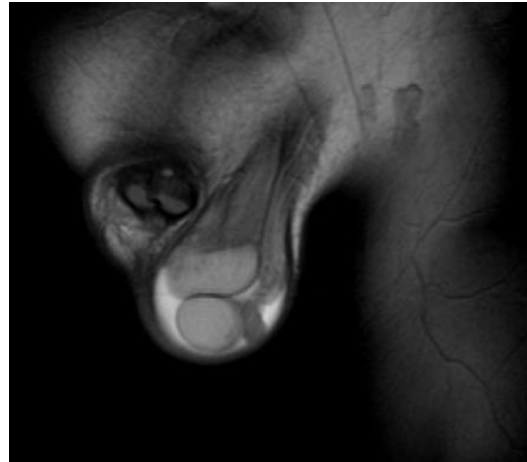


Fig. 2

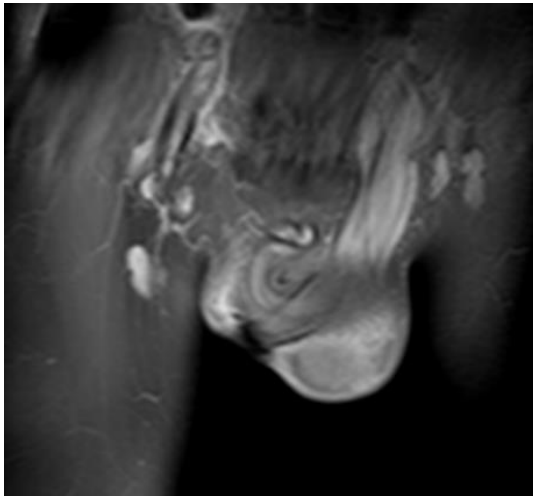


Fig. 3

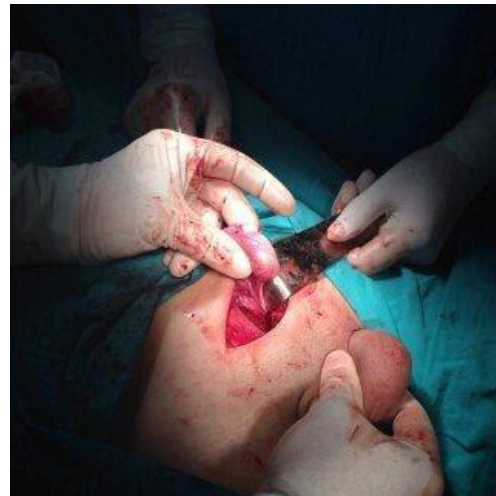


Fig. 4

Discussion

Transverse testicular ectopia is a rare form of ectopic testis in which the ectopic testis is located in the contralateral scrotum. TTE has first been defined by Lenhossekin 1886 during an autopsy and more than 100 cases have been reported. However cases with magnetic resonance imaging studies were very few reported.

Transverse testicular ectopias are classified into three types according to the existence of various additional anomalies

1. Observed only with inguinal hernia (40–50%)
2. Observed with persistent or rudimentary Mullerian duct structures (30%)
3. Observed with additional anomalies other than Mullerian remnants (inguinal hernia, hypospadias, pseudohermaphroditism, and scrotal anomalies) (20%) [3]

According to that classification, our case was type 1.

In differential diagnosis transverse testicular ectopia must be distinguished from testicular duplication and supernumerary testis. In the reported cases of testicular duplication that mention size, the supernumerary testis is said to be smaller than the normal one. Duplicated testes of equal size are unusual. In transverse testicular ectopia the testes are of equal in size as in our case. In testicular duplication the testes have a common blood supply and a common vas deferens [4]. In crossed ectopia the two testes have separate sets of blood vessels and separate vasa deferens as in our case.

In most cases TTE is revealed during herniotomy. Recently ultrasound and magnetic resonance imaging have been suggested to determine preoperative localization of impalpable testes. The usefulness of radiologic evaluation in the detection of ectopic testis remains controversial. [5,6] But as in our case US and contrast enhanced MRI can provide more useful information for preoperative diagnosis of TTE.

References

1. Barrack S. Crossed testicular ectopia with fused bilateral duplication of the vasa deferential: an unusual finding in cryptorchidism. *East Africa MedJ.* 1994; 71(6):398-400.
2. Von Lenhossek MN. Ectopia testistransversa. *AnatAnz.* 1886; 1:376-81
3. Gauderer MW, Grisoni ER, Stellato TA, Ponsky JL, Izant RJ Jr: Transverse testicular ectopia. *J PediatrSurg* 1982 ;**17**(1):43-47
4. Kaushal D Suthar, Bhavna N Mewada Crossed testicular ectopia- A review *Int J Med Sci Public Health.* 2013; 12-15
5. Lam WW, Le SD, Chan KL, Chan FL, Tam PK. Transversetesticular ectopia detected by MR imaging and MR venography. *Pediat rRadiol.* 2002; 32(2):126-129
6. Graif M, Czerniak A, Avigad I, et al (1990) High-resolution sonography ofthe undescended testis in childhood: ananalysis of 45 cases. *Isr J Med Sci* 1990;26:382–385