

Original Research Paper

General Surgery

A PRESENTATION OF TRANSVERSE TESTICULAR ECTOPIA – A CASE OF UNILATERAL DOUBLE TESTIS

Prof. Dr. B. Santhi	MS (General Surgery), DGO, Professor and Head of the Department, Department of General Surgery, Government Kilpauk Medical College, Chennai-600010.
Dr. Sudha	MS (General Surgery) DLO, Assistant Professor, Department of General Surgery, Government Royapettah Hospital, Government Kilpauk Medical College, Chennai – 600010.
Dr. Dharan Munuswamy*	MBBS, Postgraduate in MS General Surgery, Department of General Surgery, Government Royapettah Hospital, Government Kilpauk Medical College, Chennai – 600010. *Corresponding Author

ABSTRACT
Testicular Ectopia is an extremely rare anomaly in which deviation of testis descent in unilateral location of both testis. It is usually associated with an inguinal hernia with spermatic cord of the ectopic testis originating from the appropriate side. We report a case of U/L double testis presented with an inguinal hernia in a 26 year old male patient.

KEYWORDS:

INTRODUCTION AND BACKGROUND:

The commonest erratic development is the more or less incomplete descent of the testicle along the normal route of descent, which is known as cryptorchidism. In ectopia of the testicles, as opposed to cryptorchidism, the displaced testicle does not descend along the usual route but as it migrates downwards it moves into a entirely abnormal position. Usually the migrating testicle remains on its own side of the body but may end up in an unusual position e.g. part of the thigh, in the region of perineum or in the pelvic cavity. In this case, the right and left testicles were found to descend together on the left side, whereas the left side of the scrotum was entirely empty.

CASE REPORT:

A 26 years old unmarried male presented with c/o swelling over the left inguinal region for past 2 years. Swelling spontaneously reduced on lying down. On examination a reducible swelling swelling of size 4*3 cm, elliptical shaped present in the left inguino-scrotal region. Right side of the scrotum was empty while the left hemiscrotum two testis were palpable separately.

Ultrasonography of B/L Inguinoscrotal region showed, Left inguinal hernia with two testis in the left hemiscrotum. Cect abdomen and pelvis showed no abnormality other the specified.



Fig. 1: USG of Scrotum showing two testicles in left hemiscrotum Testicular tumor markers were within normal range.

	Tumor Markers	Values
	AFP	22 ug/l (< 40 ug/l)
	hCG	1.2 IU/l (< 5 IU/l)
	LDH	1.8 ukat/l (1.5 – 3.2 ukat/l)

Patient was posted and left inguinoscrotal exploration was done and found to have an indirect inguinal hernia for which left inguinal hernioplasty was done. Intra operatively two cords were separately identified and two testis were palpated normally. As the patient didn't give consent for Transeptal Orchidopexy, patient was kept in follow up.



Fig. 2: Intraop finding of two cord structures on left inguinoscrotal exploration

DISCUSSION:

There are about approximately 150 cases of unilateral double testicles described since 1886, when Von Lenhossek reported a necropsy finding. The largest incidence is found in Europe and Japan. Sixty cases having been published in Japanese literature since the first report in 1912, by Iwasaki. Unilateral double testicles are also termed as Crossed Testicular Ectopia (CTE). Demographic statistics of the United Nations, the estimation of global incidence of CTE is about 1:4 million. There is no statistical difference in regard to the affected side, and over the last 20 years the mean age at diagnosis has been 9.3 years. One case of family incidence was reported by Stauber, in two brothers with CTE and persistent mullerian remnants

There are some differences among the various cases of CTE, which have produced several theories to explain the genesis of this rare entity. Many authors propose that abnormal or absent gubernaculum could be important factors, although it has been demonstrated normal testes migration after gubernaculum ablation in animal fetuses. Most authors agree that each testis is formed on different sides, and somehow one crosses toward the opposite side in the major part of the migration trajectory. Many believe mechanical causes like internal inguinal obstruction, absent peritoneum vaginalis process, absent gubernaculum, mesorchia aderences, and duct or gonads fusion, are certainly relevant factors.

Thevathasan postulated a classification of CTE considering the eventual etiology. There is a simple classification into three types, (Type-I: Simple CTE, associated to inguinal hernia alone, Type-II: CTE associated to persistent mullerian remnants, Type-III: CTE associated to other anomalies) based upon the objective presence of associated anomalies, which would imply distinct therapeutic approaches.

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CONCLUSION:

In conclusion though TTE (Transverse Testicular Ectopia) is $\boldsymbol{\alpha}$ rare congenital anomaly, it should be considered as a differential diagnosis even in adult patients with unilateral testis or infertility and if it is diagnosed as detailed imaging and hormonal Biochemical investigations should be employed considering the wide spectrum of associated conditions.

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