TRANSVERSE TESTICULAR ECTOPIA: A CASE REPORT

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ABSTRACT: Transverse testicular ectopia, an anomaly due to deviation in the testicular descent resulting in unilateral location of both testes as both the testis descends through single inguinal canal. Patient usually presents with inguinal hernia on one side and cryptorchidism on other side during early childhood. A case of one year old boy clinically presenting as right inguinal hernia with left sided cryptorchidism at tertiary level referral center is reported. Surgeon's role is pivotal as preoperative diagnosis and postoperative follow-up for malignancies in these cases are very crucial.
KEY WORDS: Testicular ectopia, anomaly.

CASE REPORT: A one year old boy presented with right sided inguinal swelling of one month duration. Physical examination revealed inguinal hernia on right side with impalpable testis on left. Left hemiscrotum was small and empty. No other genitourinary abnormality was noted.

Investigation: Ultrasonographic evaluation revealed testis measuring 1.46 X 0.82 cm in right scrotal sac. Left scrotal sac was devoid of the testis. A testis like oval shaped structure seen at right deep inguinal ring measuring 1.34 X 0.81cm suggesting a crossed testicular ectopia.

Surgery: The patient underwent herniotomy through an inguinal crease incision on right side and left testis was found in right deep inguinal ring. Each testis was noted to have its corresponding spermatic cord and separate vasa deferentia. The two vasa deferentia were fused four centimeter proximal to the testis. The fused part looked like a thick walled structure and it was inseparable. The two testes were of same size and identical in appearance, each having its own vascular pedicle. After the removal of the hernial sac both testes were easily brought down and fixed sequentially into the scrotum. Left testis was put in a left hemiscrotum through a subcutaneous plane to the scrotal sub dartos pouch. Postoperatively there was mild infection which was managed conservatively.

DISCUSSION: As per the literature there are about 147 cases of Transverse Testicular Ectopia has been reported. The global incidence of Transverse Testicular Ectopia is about 1:4 million[1].

Transverse testicular ectopia also known as crossed testicular ectopia, testicular pseudo-duplication, paradoxical or transverse aberrant testicular maldescent[2]. On the basis of the associated abnormalities it is divided into three types. In Type I there is accompanying hernia only. Type II comprises of the group of patients having ectopia accompanied by persistent Mullerian duct. The third group had associated disorders other than persistent mullerian[3] remnant.

The rare anomaly was described by Lenhossek right back in 1886[4]. Later on Jordan, Halstead, Lowsley reported cases on transverse testicular ectopia. Regarding its development there are different schools of thought. The first and foremost was one explaining multiple insertion theory by Lockwood [5]. Gupta and Das postulated adherence and fusion of developing Wolffian duct takes

place and descent of one testis causes second one to follow [6]. Gray and Skandalakis opined that crossing must have occurred later as in most cases duct remained separate[7].

In our case ectopic testis was located at the deep inguinal ring. After separation from the hernial sac the attachments of each testis were dissected from the internal inguinal ring, the technique provided us sufficient length for the testis to be brought down to lie in Dartos pouch without tension. Ectopic testis was placed in left hemiscrotum.

Testicular ectopia has been associated with an incidence of upper and lower urinary tract anomalies [8, 9]. Persistent Mullerian duct structure and horse shoe kidney and intersex are most commonly reported [10]. Testicular ectopia usually presents as inguinal hernia, and in most cases diagnosis is made intra-operatively. The use of USG, CT scan, MRI and venography will help in preoperative diagnosis, as in our case.

It can be concluded from the study that when a child presents with concurrent cryptorchidism of contra lateral side with unilateral inguinal hernia a diagnosis of transverse testicular ectopia should always be kept in mind. Correct preoperative diagnosis and postoperative follow-up for development of malignancies makes surgeons' role pivotal in cases of transverse testicular ectopia.

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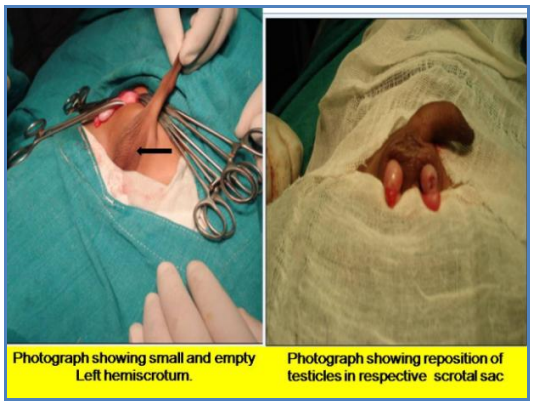

Transverse Testicular Ectopia a Case Report photo 1

Transverse Testicular Ectopia a Case Report photo 2

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