

# Transverse Ectopia of the Testis : A Case Report

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## Abstract

A case of transverse ectopia of the testis in a man of 30 years is presented. The patient was admitted for a right inguinal herniorrhaphy and the finding of ectopic testis was accidental.

## Introduction

An ectopic testis is defined as the testis which has shifted away from its normal pathway of migration between the abdominal cavity and the bottom of the scrotum and is located in an ectopic position. The five major sites of testicular ectopia are the superficial inguinal pouch, the perineum, the femoral canal, the suprapubic area and the opposite scrotal compartment (transverse). The transverse testicular ectopia is the rarest of all ectopic positions, also called paradoxical descent or transverse aberrant testicular maldescent and it is the condition where both testes descend through the same inguinal canal to the same side of scrotal sac, or the testis which has crossed over may be trapped in the hernial sac. On reviewing the literature 85 cases have been reported so far<sup>1,2</sup>.

## Case Report

A 30 years old man, married and father of a child, presented in the surgical outpatient of PIMS with a right inguinoscrotal swelling that was present since birth, but had recently increased in size and was painful off and on. A diagnosis of right inguinal hernia was made. It was reducible and indirect. The scrotum looked normal but a thick cord was palpable at the root of right side of scrotum. After routine investigations, he was put on waiting list for herniorrhaphy (six weeks later at an elective list). Exploration of right groin revealed a large sac. There were two thick cords emerging from the deep ring with the sac lying in between. Because of difficult dissection, the scrotal contents were delivered out and sac was opened. Both the testes were lying in the sac and their gross appearance was normal. The right testis was placed well in the scrotum whereas the left ectopic testis was lying at the root of scrotum. The dissection also revealed two vasa deferentia and vas-like structure joining the two testes. The sac was dissected from the cords and transfixed at the deep ring. Both testes were replaced in the scrotum: one of them was fixed to the septum and the other to the floor of the scrotum. Routine herniorrhaphy was performed. The patient made a smooth, uneventful recovery and was discharged a week later. A post-operative ultrasound revealed no genitourinary abnormality and confirmed the position of both the testes in the right hemiscrotum.

## Discussion

Lenhossak published the earliest report about transverse ectopia of the testis. Haistead described what was probably the first recorded case in the English literature. Since then, about 85 cases have been reported in literature to date<sup>1</sup>. Testicular ectopia is believed to be directly related to the development of the gubernaculum, which is known to be divided into five slips, one going to each of the ectopic sites. The scrotum normally contains the bulk of gubernaculum and the testis normally follows this path

during its descent. It has been suggested that when one of the other four branches contains the bulk of the gubernaculum, the testis is misdirected from its normal pathways of descent into the ectopic location<sup>3,4</sup>. The concept of third testis was given by Campbell<sup>5</sup>, according to which transverse ectopia is in fact a unilateral development of two testes: the contralateral testis also develops but is retained in the abdomen. Therefore, he stressed for a laparotomy to look for the third testis, because of the high risk of malignancy in it. The most common ectopic location is the superficial inguinal pouch lined by thin fibrous tissue, lateral to the external inguinal ring. The transverse testicular ectopia is the rarest of all types but probably has got the same mechanisms of its aberrant descent. Clinically, the most common mode of presentation is inguinoscrotal swelling: congenital inguinal hernia is the most frequent associated anomaly, but rarely there can be hypospadias and a small, infantile uterus within the scrotal sac. In the recorded cases, the right testis was usually the ectopic one and rarely the left testis had gone over to the right side (as in our case). If one detects an empty hemiscrotum on clinical examination and an additional mass is felt in the contralateral scrotum, transverse testicular ectopia should be considered. An abdominal ultrasound should be carried out to discover any associated genitourinary anomaly, which was done in our case post-operatively. Surgical intervention is required either to replace the testis in the scrotum, if possible, or to remove the testis if it is atrophic. The associated hernia should be repaired. The risk of malignancy and torsion is high in an ectopic testis. In none of the cases reported, a malignant tumour was diagnosed.

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