

# Perineal Ectopic Testis A Rare Variant of Testicular Maldescent: A Case Report

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## ABSTRACT

*Perineal ectopic testis is one of the rare congenital anomalies. It is found in approximately 1% of all the cases of undescended testes. In this report a patient of perineal ectopic testis is presented. On examination an oval mass was palpable in the groin, just lateral to the left empty hemi-scrotum. Orchidopexy was performed along-with herniotomy for patent processus vaginalis.*

*Key words* Ectopic testis, Orchidopexy, Perineum, Undescended testis, Maldescent.

## INTRODUCTION:

Ectopic testicular location refers to a condition when testis fails to descent along its normal path into the scrotal position and is deviated to an abnormal anatomical site.<sup>1</sup> Perineal ectopic testis is a rare congenital anomaly. It accounts for less than 1% of all the undescended testes.<sup>2</sup> Diagnosis can be made easily at clinical examination. A high index of suspicion must be exercised when an empty hemi-scrotum is noted. A search for testis in ectopic locations is therefore warranted. An ultrasound can be performed to provide anatomical details. This case report describes a child in whom the diagnosis was delayed.

## CASE REPORT:

A-4-years old child was brought to the outpatient clinic for empty left hemi-scrotum with a small swelling noted in the left groin. Examination of the inguinoscrotal region revealed an empty left hemi-scrotum. A small oval shaped mass was palpable in the perineum, just lateral to the left hemi-scrotum in the groin (Fig. I). The right testis was palpable in the right hemi-scrotum. It was of appropriate size and texture. A clinical diagnosis of left perineal ectopic testis was made. Parents delayed seeking an expert opinion for empty hemi-scrotum as they

considered this as an inoperable condition. An ultrasound was advised to provide details of the testicular anatomy including its size. Parents were counselled and surgery was planned.

Surgery was done on elective list under general anesthesia through an inguinal approach. The testis was dissected out of the abnormal position after identification of the spermatic cord. The gubernacular attachment was severed. A well-defined patent processus vaginalis was also found. The cord structures, the vas deferens and spermatic vessels, were gently separated from the sac which was transfixated at the level of deep ring (Fig. II). Testis was then re-routed after creating a space in the hemi-scrotum. Orchidopexy was performed after



Fig I: Perineal ectopic testis (white circle) with empty left hemi-scrotum.

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placing the testis in the dartos pouch. Postoperative recovery was uneventful. The child was discharged and followed in the outpatient department. His inguinal surgical wound healed well. The testis was found in its new normal position without any tension on the cord. Parents were advised to continue the follow up on yearly basis till the adulthood and later age by the individual himself, for assessment of testicular size and semen analysis.



Fig II: Left testis dissected out of ectopic location after division of gubernacular attachment.

#### DISCUSSION:

The embryological development of the testis and its descent is a complex, and multi-stage phenomenon. Number of theories are proposed to describe the process. The factors involved include a number of neurotransmitters produced through nerve conduction as well as different mechanical forces and the gubernaculum itself. It is hypothesized that migration of the gubernaculum through the inguinal canal precede the testicular descent. It force open the inguinal ring thus allowing the testis to move passively into the scrotum. Androgens play an important role in this mechanism. After testicular descent the gubernaculum regresses. Any aberrations in these processes can result in failure of the testicular descent or deviation from its normal route, into the ectopic locations, of which perineum is one of the sites.<sup>3,4</sup> In our patient testis was found in this area.

Ectopic testis is different anatomically from an

undescended testis. The mechanism, though not fully understood, assumed to involve the anomalies of the genitofemoral nerve, overdevelopment and elongation of one of the tails of the gubernaculum, or any mechanical force that pulls the testis into an abnormal location.<sup>3</sup> Different ectopic locations of testis are reported in literature in addition to the perineum as in our patient. Testis may be found in femoral region, at the root of the penis, into the other half of the scrotum - the transverse testicular ectopia, in pre-peritoneal position and anterior abdominal wall.<sup>5</sup>

Physical examination is the key to diagnose ectopic testis as in our patient. Compared to the undescended, the ectopic testis has a better prognosis. However, the abnormal location of the testis can lead to a variety of complications. Ectopic location still exposes the testis to a higher body temperature that may prove detrimental in the production of sperms later in life. In addition, testes are prone to trauma in an abnormal location. An empty scrotum should be picked up in the neonatal period. This was delayed in our patient. Therefore, awareness must be created among pediatricians, general practitioners, and other primary healthcare providers.<sup>6</sup> The surgery for the ectopic testis in perineal location is not a demanding endeavor. Careful surgical dissection and re-routing into the scrotum can be performed easily. This is due to the presence of an adequate length of the spermatic cord. In our patient, parents were under the impression that this condition was not operable. They did not seek medical advice early. This myth must be addressed through mass education.

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Ethics statement.

The consent of the parents was taken to report this case for educational purposes. Pictures are produced with the permission of the family. Confidentiality is maintained while reporting the case.

Competing interest: Author declares that she has no competing interests.

Source of funding: None

How to cite this article:

Israr S. Perineal ectopic testis, a rare variant of testicular maldescent: A case report. *J Surg Pakistan.* 2024;29 (1):29-31.

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Received for publication: 20-05-2024

Accepted after revision: 10-06-2024

Author's contribution:

The author conceived the idea, managed the patients, searched literature, wrote the manuscript and revised it. Author is responsible for the content of the manuscript