



## A RARE CASE OF PERINEAL ECTOPIC TESTIS

### General Surgery

**Dr. N. K. Goswami** M. S. General and Laparoscopic Surgeon, Associate Professor, Department of General Surgery, Shree M. P. Shah Govt. Medical College, Jamnagar, Gujarat.

**Dr. Priyanka M. Aanandaka\*** M. S., Senior Resident, Department of General Surgery, Shree M. P. Shah Govt. Medical College, Jamnagar, Gujarat. \*Corresponding Author

### ABSTRACT

In Perineal ectopic testis (PET), the testis is located between the penoscrotal raphe and genitofemoral fold. PET incidence is < 1% of all undescended testis. It is a rare congenital anomaly.

This article reports a case of an inguinal orchidopexy of the ectopic testis on a male patient aged 9 year presenting a right testicle located in right perineum. Examination of patient with empty scrotum (mal-descent testes) should include examination of sites like perineum to look for ectopic testis.

### KEYWORDS

Cryptorchidism, ectopic testis, perineum, orchidopexy.

#### INTRODUCTION :

Ectopic testis refers to the testis entering a location other than the scrotum after passing the inguinal canal. It usually derives from overdevelopment and lengthening of a segment of the gubernaculum or from obstruction of the entrance to the scrotum.

Ectopic testes emerge outside the external inguinal ring and then are misdirected along the course of their remaining descent to arrive at an abnormal position. Perineal ectopic testis is a condition in which the testis has descended, but occupied an abnormal position between the penoscrotal raphe and the genitofemoral fold.

The other sites for testicular ectopia include opposite side of the scrotum also called crossed ectopic/transverse testicular ectopia, the femoral canal, pre-peritoneal, extracorporeal ectopic testis and anterior abdominal wall have also been reported. An empty scrotum with palpable perineal soft mass is suggestive of ectopic testis in the perineum. Perineal ectopic testes are prone to trauma, torsion and malignancy. This is also associated with inguinal hernia and infertility. Functional prognosis is similar. Orchidopexy through an inguinal incision is the standard procedure as the cord structures are of normal length. If the testis is severely atrophic, orchidectomy is undertaken and orchidopexy performed on the contralateral normal testis, which is the standard procedure for a solitary testis. We report a case of perineal ectopic testis in 9 year old child at Department of general surgery, Guru Gobind Singh Government Hospital, Jamnagar, Gujarat, India treated in Feb. 2022.

#### CASE REPORT :

A 9 year old male patient presented to our outpatient clinic with a right empty hemiscrotum. The left hemiscrotum maturation was normal. The patient was born at-term and healthy, without other associated pathologies. On Examination, an oval-shaped solitary mass was detected in the perineum, its consistency and size were within normal ranges. On the further evaluation with ultrasound we measure this mass as 15x11x6 mm. in medial aspect of right upper thigh region near perineum. Our clinical decision of a Right perineal ectopic testis (PET) was made.

Surgical exploration through inguinal incision revealed gubernaculum testis attached with perineal tissues. The testis was mobilized and gently delivered into the inguinal wound. It was found to be normal in size with adequate length of the vas and vessels; the gubernaculum was quite thick, hernia sac was present in right side, testis was fixed in the ipsilateral scrotum using the standard dartos pouch technique (Right orchidopexy) followed by hemiorrhaphy was performed.

During the surgery, the patient presented no complication and Follow-up evaluations observed the right testis located in the distal portion of the corresponding hemiscrotum and the volume compatible with the contralateral gonad.

#### DISCUSSION :

Undescended testis is a frequent condition affecting up to 5% of full-

term new-borns and with an incidence of up to 45% in premature infants.

Testicular maturation and descent from abdomen to scrotum is a complex and multistage process which starts from 7th to 35<sup>th</sup> week of gestation, that is influenced by hormonal, genetic and structural factors. There are two stages; intraabdominal migration and inguinal migration. Generally, the testis follows the route of the gubernaculum, but sometimes, it is misdirected to an ectopic location. The rarest form of testicular ectopia is PET.

The ectopic testis may be in the superficial inguinal pouch, the femoral region, the suprapubic region, the opposite side of the scrotum, or in the perineal region (PET). It is most common, at a rate of 75%, in the superficial inguinal pouch.

Perineal ectopic testis, first described in 1786 by John Hunter, is a rare anomaly constituting less than 1% of all cases of undescended testis.

Perineal testicular ectopia is seen very rarely and bilaterality is even scarcer. Approximately, 175 cases of perineal ectopic testes have been reported in the literature and 80% of these cases are unilateral.

The exact etiology of testicular ectopia is unknown; nevertheless, gubernacular abnormalities, genitofemoral nerve disorders, increased intra-abdominal pressure, and endocrine abnormalities are the most prominent ones. The ectopic testis may cause numerous complications like trauma, torsion, atrophy and infertility in bilateral cases.

The diagnosis of testicular dystopias is always clinical. It includes a detailed medical history and physical examination. When the testicle is not palpable in the scrotum, other topographies have to be examined and the possibility of an ectopic gonad should be investigated. As in the case presented, the right testicle could be observed in the perineum. The use of complementary imaging usually is not necessary when there is a palpable gonad. Laboratorial tests and hormonal investigation are required only when sexual differentiation disorders (SDD) are suspected.

When an ectopic testis is diagnosed it is necessary to make a orchiopexy before 2 years of age, but in the case of an atrophy of the testis and over 2 years of age, orchidectomy is the best option. We perform a orchidopexy in our patient as testis was found normal, despite the tendency to atrophy with increased age, In this situation it was advised to continue with a long term follow-up.

#### CONCLUSION :

Although a rare diagnosis, testicular ectopia should be considered when assessing patients with cryptorchidism. It is always important to conduct a meticulous clinical examination of the regions where the ectopic gonad can be located. Clinical diagnosis is essential and early surgical treatment must be performed. In many cases there are similar outcomes as in other ectopic testes. Therefore we believe that

orchidopexy is the treatment of choice in selected patients, however self examination and long term follow up is mandatory.

#### **Informed Consent :**

Written informed consent was obtained from parents of the patient who participated in this study.



#### **1. Pre Operative Photograph of Testis in right perineum**



#### **2. Intra Operative Photograph of Testis with its attachments**



#### **3. Post Operative Photograph of Orchidopexy and Herniorrhaphy**

#### **REFERENCES :**

1. Maidenberg M. A case of an ectopic testis in the perineum. *ProgUrol* 1993; 3: 268-71.
2. Fonkalsurd EW. Undescended testis. In: Welch KJ, Randolph JG, Ravitch MM, O'Neil JA Jr, Rowe MI, (edi). *Pediatric surgery*. 4th ed. Chicago: Year Book Medical Publishers; 1986.p.793-807.
3. Radmayr C, Dogan HS, Hoebeke P, Kocvara R, Nijman R, Stein R, Undre S et al. Management of undescended testes: European Association of Urology/European Society for Paediatric Urology Guidelines. *Journal of Pediatric Urology*. 2016; 12: 335-43.
4. Ramareddy R S, Alladi A., Siddappa O.S. Ectopic testis in children: Experience with seven cases. *Journal of Pediatric Surgery* (2013) 48, 538–541.
5. Ulubay M. Perineal ectopic testis: A rare congenital anomaly. *Urology Case Reports*. 2019; 24: 10085.
6. Jlidi S, Echaieb A, Ghorbel S, Khemakhem R, Ben Khalifa S, Chaouachi B. Perineal ectopic testis: report of four paediatric cases. *Prog Urol* 2004; 14: 532-3.