

Perineal Ectopic Testis in an Adult: A Case Report

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Abstract

Case Report

The Perineal ectopic testis (PET) is a kind of Ectopic Testis (ET), in which the testis is located between the penoscrotal raphe and genitofemoral fold. PET is a rare condition with prevalence of 1% of all cases of undescended testis. It is easily identifiable and can be easily treated by orchidopexy before the age of 2 years and by orchidectomy afterwards. PET may be associated with inguinal hernia. In this study we diagnosed a case of rt. sided PET in a 29 years old male patient, associated with Hernia. This case was treated by Orchidectomy and Herniotomy along with Hernioplasty.

Keywords: Perineal ectopic testis, Undescended testis, Inguinal Hernia, Orchidectomy, Herniotomy.

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INTRODUCTION

Cryptorchidism is most common anomaly of the genitalia, seen in 3% of male infants at birth [1]. Most of these testes are cryptorchid with descent being arrested along its normal pathway resulting in abdominal, Inguinal or high scrotal testis and are called undescended testis. Less frequently a testis may stray from the path of descent to settle in an ectopic location, outside the scrotum and is called ET. The testis usually progresses the guidance of Gubernaculum. ET occurs in only about 5% of cases of empty scrotum. Five major sites of ectopic testis are currently described.

1. Superficial Inguinal Pouch
2. Femoral Canal
3. Suprapubic region
4. Contralateral Scrotum
5. Perineal region.

The PET is a rare condition. The First Case of PET was reported by John Hunter in 1786 [2]. PET is the most common type of ET, occurs in about 1% of the patient [3].

CASE PRESENTATION

A 29 years old male patient reported to our Out Patient Department with a complaint of right sided inguinoscrotal swelling. His examination revealed right sided incomplete uncomplicated Indirect Inguinal Hernia with empty right sided hemiscrotum. The contralateral left sided testis was in normal location in

left hemiscrotum. An oval shaped soft mass was detected in perineum measuring about 3x2x1cm (Fig 1 & 2). A clinical diagnosis of right sided PET with right sided Incomplete Uncomplicated Indirect Inguinal Hernia was made.

We recommended right sided orchidectomy for PET, because of the patient's age and atrophied testis. Surgical exploration was done through the right sided inguinal incision. Right sided Herniotomy with Hernioplasty with right sided orchidectomy was done. Gubernaculum was fixed with perineum. The patient recovered well and did well in follow up as well.

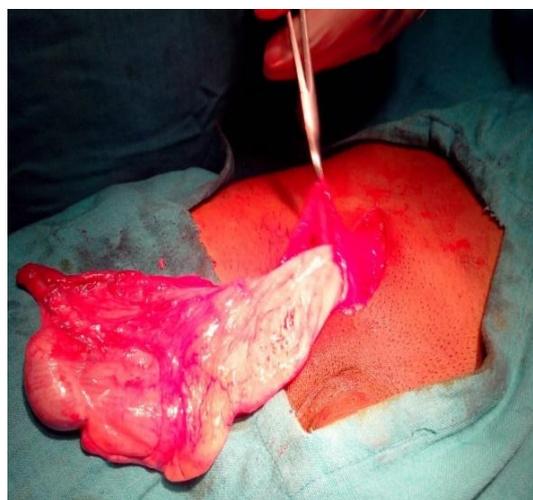


Fig-1

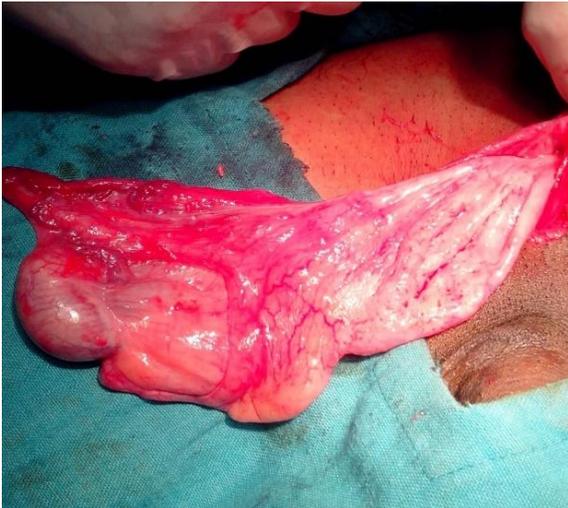


Fig-2

DISCUSSION

The descent of the testis from abdomen to the scrotum is a complex and multistage process. It starts from 7th to 35th week of gestation. This process is influenced by genetic, hormonal and certain mechanical factors. When the testis completes normal transinguinal migration, but is misdirected outside the normal pathway of descent below external ring and “migrates” to an abnormal location. This is called “Ectopic testis” and is relatively less common condition.

The etiology of testicular ectopia is not very clear. Congenital fascial bands at the root of the scrotum could be a cause of migration of testis to an ectopic site [4]. Lockwood postulated the 5 slips of gubernaculum theory to explain the descent to the ectopic site, in which he suggested that distal part of the gubernaculum has several insertions. If scrotal insertion is dominant, the normal descent is seen and if another insertion is dominant, the insertion diverts the testis towards itself to ectopy [5]. Furthermore, it is postulated that abnormal fixation of the distal part of gubernaculum prohibits natural descent of the testis [6]. Hutson suggested that abnormal position of genitofemoral nerve leads to an abnormal migration of gubernaculum and pushes the testis to an abnormal position [7]. Middleton and colleagues also reported that increased intra-abdominal pressure could facilitate testicular descent [8]. Lozano Ortega and associates stated that inadequate hormonal stimulation may lead to ectopy [9]. The most common regions of ET in descending orders are superficial inguinal pouch (Denis Browne pouch), perineum, femoral canal, contralateral scrotum and prepenile region [10]. Ant abdominal wall has also been reported a location of ET [11, 12]. It is most common at the rate of 75%, in the superficial inguinal pouch.

PET first described in 1786 by John Hunter, is a rare congenital anomaly, constituting less than 1% of all cases of undescended testis [13]. PET is seen very rarely and bilaterally is even scarcer [14]. Approximately 187 cases of PET have been reported in the literature and 80% of these cases are unilateral [15]. Our case was of unilateral PET. Like undescended testis, ectopic testes are prone to trauma, Testicular torsion, Inguinal Hernia, Atrophy and Infertility (in bilateral cases) [4, 16]. Our case of PET was associated with Incomplete indirect inguinal hernia and atrophic testis of same site. The functional outcome of ectopic testis is difficult to define, but has been found to be similar to other forms of undescended testis [17].

An empty scrotum with a soft perineal mass on ipsilateral side is very suggestive of perineal testis, as was the case of our patient. Due to our patient’s young age, the empty scrotum and swelling immediately below were easily visible. When an ET is diagnosed it is necessary to do the orchidopexy before 2 year of age since afterwards definite histological changes can be demonstrated in the undescended testis, but in the case of atrophy of testis and over 2 years of age, orchidectomy is the best option [4, 10]. It has also been advocated that in cases of PET, surgery should be performed before 6 months of age even if it is not associated with inguinal hernia [10].

In adult patients with PET, Orchidectomy is considered through inguinal incision since accompanying hernia may occur [18]. In our case, PET was coincidental finding. This PET was atrophied and associated with incomplete indirect inguinal hernia in an adult, therefore we decided to do orchidectomy with herniotomy with hernioplasty through inguinal incision, since testicular cancer is more common in an ectopic testis than in normally descended organ. Orchidopexy has been performed in some selective cases of PET diagnosed in adults [19, 20] and in patients who requested for it [21, 22], however self examination and long term follow up is mandatory in such cases.

CONCLUSION

PET is a rare disease and diagnosis can easily be made by physical examination of ectopic regions and empty scrotum. A careful search of ectopic sites of testis should be done as a fundamental part of clinical examination of patients with an empty scrotum and diagnosis should be made as early as possible as the type and timing of treatment is difficult in ectopic and undescended testis. Orchidectomy is the treatment of choice of PET in an adult patient. Our patient recovered well and did well in follow up as well. Orchidopexy can be done in some selective patients which requires education of patient about self-examination and long term follow up.

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