Case Report

Perineal Ectopic Testis

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INTRODUCTION

Perineal ectopic testis is a rare condition. The first case was reported by John Hunter in 1786.[1] An undescended testis can be located anywhere in the pathway of testicular descent outside the scrotum. The testis can also be located in an ectopic position. The most common regions in descending order are the superficial inguinal pouch (Denis Browne pouch), perineum, femoral canal, contralateral scrotum, and prepenile region. Perineal ectopic testis is seen approximately in 1% of all cases of undescended testes.[2]

An empty hemiscrotum with palpable perineal soft mass is suggestive of an ectopic testis in the perineum. Antenatal diagnosis of perineal ectopic testis can be made ultrasonographically.[3]

In this report, we present a case of a perineal ectopic testis and its surgical management.

CASE REPORT

A 19-year-old man presented to our outpatient clinic with a perineal mass and discomfort. Examination showed an empty and poorly developed left hemiscrotum. The contralateral testis was in its normal location in the right hemiscrotum (Figure 1). An oval-shaped soft mass was detected in the perineum measuring 4 × 5 × 6 cm. A clinical diagnosis of perineal ectopic testis was made.

We recommended orchidectomy for the left perineal testis because of the pa-

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tient's age. However, the patient wanted his testis placed in the scrotum; hence, a left orchiopexy was performed. Surgical exploration was performed through inguinal skin crease incisions. The gubernaculum was fixed to the perineum. The testis was fixed in the left side of the scrotum using the dartos pouch technique (Figure 2).

Postoperative examination at one month revealed a normally located left testis in the scrotum (Figure 3). The patient was satisfied with the outcome of the surgery.

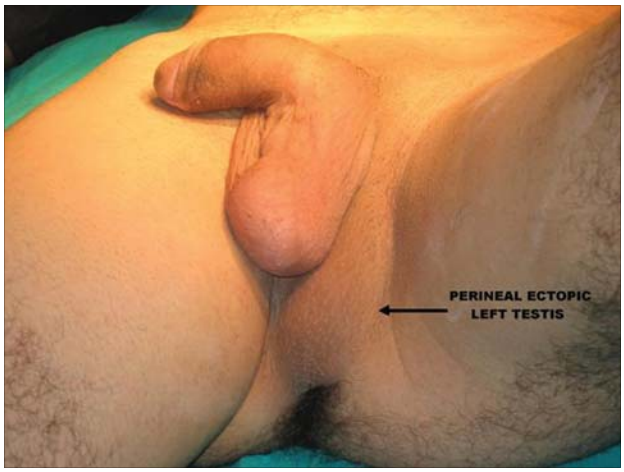

Figure 1. A left empty hemiscrotum and a mobile testicular mass in the perineum.

Figure 2. Surgical exploration of the left ectopic testis through inguinal incision.

Figure 3. Scrotum at one-month following surgery.

DISCUSSION

Descent of the testis is thought to occur in two phases; intra-abdominal migration and inguinal migration. Testicular development and descent from the abdomen to the scrotum is a complex and multistage process influenced by genetic, hormonal, and certain mechanical factors. The ectopic testis completes normal transinguinal migration, but is misdirected outside the normal path of descent below external ring. Perineal testis is the commonest form of true testicular ectopia, excluding the superficial inguinal form. Perineal testis is a rare congenital anomaly.[4]

The etiology of testicular ectopia is unknown; however, some theories like gubernacular abnormalities, genitofemoral nerve disorders, increased intra-abdominal pressure, and endocrine disorders are the most prominent ones.[5] Lockwood suggested that distal part of the gubernaculum has several insertions. If scrotal insertion is dominant, normal descent is seen and if another insertion is dominant, the insertion diverts the testis toward itself leading to ectopy.[6] Furthermore, it is postulated that abnormal fixation of the distal part of the gubernaculum prohibits natural descent of the testes.[7] Hutson suggested that abnormal position of genitofemoral nerve leads to an abnormal migration of the gubernaculum and pushes the testis to abnormal position.[8] Middleton and colleagues also reported that increased intra-abdominal pres-

sure could facilitate testicular descent.[9] Lozano Ortega and associates stated that inadequate hormonal stimulation may lead to ectopy.[10]

The ectopic location of the testis is associated with a number of complications, such as trauma, torsion, and infertility in bilateral cases.[11] Therefore, treatment is warranted. Most authors recommend surgical correction at approximately 1 year of age, because definite histological changes can be demonstrated in the undescended testes.[12] Orchiopexy is the treatment of choice under 2 years of age. But if an atrophic testis is detected, orchidectomy should be performed.

If the testis cannot be palpated in the usual position, all the possible sites for an ectopic testis should be carefully examined. It has been advocated that in cases of perineal ectopic testis, surgery should be performed before 6 months of age even if not associated with inguinal hernia.[2]

Testicular cancer is more common in an ectopic testis than in a normally descended organ. Therefore, we recommended the patient an orchidectomy. However, he wanted his testis placed in the scrotum. Thus, we proceeded with orchiopexy; however, long-term follow-up was advised.

We believe orchiopexy is the treatment of choice in selected patients with perineal ectopic testis. However, self testicular examination and long-term follow-up is mandatory.

CONFLICT OF INTEREST

None declared.

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