

# Perineal Ectopic Testis - A Rare Encounter in Paediatric Surgical Practice

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## ABSTRACT

Perineal ectopic testis is a rare form of testicular maldescent. We report 2 patients with perineal ectopic testes, in one of them, the condition was bilateral (only the 6th case of this variety). Surgery was performed in both cases and testicles were mobilized and fixed in the scrotum. Gubernaculum testis was found to be fixed in the perineum. Examination of patient with empty scrotum (maldescent testes) should include examination of sites like perineum to look for ectopic testis.

**Key words:** Cryptorchidism. Perineum. Ectopic testis. Orcheopexy.

## INTRODUCTION

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<sup>1</sup> with an incidence of less than 1% of all cases of undescended testis.<sup>2</sup> 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.<sup>3</sup> 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, early surgery is, therefore, recommended.<sup>1</sup>

The present cases are reported to stress importance of thorough physical examination including examination of ectopic sites like perineum in cases of testicular maldescent or empty scrotum.

## CASE REPORT

### Case 1

A 6-year-old boy was brought for the management of right empty scrotum. Examination revealed a healthy-looking child with less developed and empty right scrotum. The contralateral testis was present in the scrotum. An oval shaped soft mass was found in the perineum. The diagnosis of right ectopic testis was made and surgery was performed. Surgical exploration through inguinal incision revealed gubernaculum testis attached with perineal tissues (Figure 1). The testis was mobilized and gently delivered into the inguinal wound (Figure 2). It was found to be small in size with



Figure 1: Surgical exploration of ectopic testis through inguinal incision.



Figure 2: Mobilization of ectopic testis

adequate length of the vas and vessels; the testis was fixed in the ipsilateral scrotum using the standard dartos pouch technique. Follow-up revealed right testis present inside the scrotum.

### Case 2

A 5-year-old boy presented with empty scrotum since birth. General and systemic examination revealed nothing abnormal. Perineal examination showed an empty and less developed scrotum. Oval shaped soft masses were palpable in the perineum on either side of the empty scrotum (Figure 3). Diagnosis of bilateral ectopic testes was made and surgery was performed. Surgical exploration was performed through inguinal skin crease incisions on both sides in single sitting.

The gubernaculum testis was found attached with perineal tissues on either side. The left sided testis was of normal size while the right one was smaller. The vas and testicular vessels were of normal length on either side. The hernia sac was present on the left side only. Both the testicles were fixed in their ipsilateral side using the dartos pouch technique. Postoperative course was uneventful and the follow-up revealed presence of testes inside the scrotum.



Figure 3: Examination of the patient for ectopic testis.

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## DISCUSSION

Testicular development and descent from abdomen to scrotum is a complex and multistage process which starts from 7th to 35th week of gestation.<sup>4</sup> Normally, the testis follows the course of scrotal extension of gubernaculum, but occasionally, it follows one of the other tails of the gubernaculum to an ectopic location in the perineum, suprapubic, femoral or contralateral hemiscrotal areas.<sup>5</sup> Normal migration of the testis is thought to be under the influence of androgenic hormones and certain mechanical factors,<sup>4</sup> any disturbance in this process leads to maldescent that could be in its normal pathway (true undescended testis) or an abnormal pathway (ectopic testis). The cause of testicular ectopia is unknown but it is thought to be due to abnormal position of genito-femoral nerve which leads to an abnormal migration of gubernaculum and thus takes testis to abnormal position.<sup>6</sup>

Ectopic testis can be found at femoral canal, suprapubic region, perineum, opposite side of the scrotum and anterior abdominal wall.<sup>3</sup> Some authorities include the superficial inguinal pouch as site of ectopic testis (75% cases of testicular ectopia),<sup>5</sup> this should be grouped in undescended variant.<sup>7</sup>

Perineal testicular ectopia is seen very rarely and bilaterality is even scarcer.<sup>8</sup> Approximately, 175 cases of perineal ectopic testes have been reported in the literature and 80% of these cases are unilateral.<sup>1</sup> The number of cases reported with bilateral perineal testicular ectopia including the present report is very limited.<sup>8,9</sup>

An empty scrotum with a soft perineal mass on ipsilateral side is very suggestive of perineal testis as was the case in both of these patients.

Some cases of ectopic testis diagnosed on ultrasound, antenatally at 38 weeks and confirmed in postnatal period by clinical examination, are also reported.<sup>2</sup>

The ectopic location of the testes are associated with a number of complications like trauma, torsion and infertility (in cases of bilateral cases).<sup>1</sup>

It is generally accepted that undescended testis should not be operated before 6 months of age, but surgery for ectopic testes should be carried out before the age of 6-months even if not associated with inguinal hernia<sup>10</sup>

and attempts to move ectopic testes into the scrotum with hormone therapy have been found ineffective.<sup>5</sup> Perineal ectopic testes are usually explored through standard inguinal skin-crease incision; some surgeons use a low scrotal approach due to the low incidence of concomitant hernia. The hernia sac was noted in one patient and on one side only in whom the condition was bilateral. Gubernaculum is usually found fixed to the perineum as was noted in these cases. The testes can be placed in ipsilateral hemiscrotum easily because the spermatic cord and vessels will be sufficiently long.<sup>10</sup> The functional outcome of ectopic testis is difficult to define, but has been found to be similar to other forms of maldescented testis.

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