

## LETTER TO EDITOR (VIEWER'S CHOICE)

### ECTOPIC TESTIS - A RARE ENCOUNTER OF EMPTY SCROTUM

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A 3030-g term male infant was delivered at 39 weeks gestation to a 30-year-old woman. There was no history of consanguinity. On examination, palpation of the left inguinal area showed no testis. Examination of the possible sites for an ectopic testis revealed a firm, mobile perineal mass identical to the right testis (Figure 1). No other abnormalities were noted.

**Figure 1. Left perineal ectopic testis**



Cryptorchidism is the most common glandular anomaly. Undescended testis is a common genitourinary anomaly in which the testis fails to descend completely and is located along the normal pathway of descent in the retroperitoneum, inguinal canal or scrotal entrance. It is noted in 3% of male infants at birth (1). Ectopic testis (ET) occurs in only about 5% of the cases of empty scrotum. Perineal ectopic testis, the most common type of maldescended testis occurs about 1% of the patients (2). The ectopic testis is frequently misdiagnosed as cryptorchidism or even anorchism. The condition is thought to result from a deviation of terminal testicular descent from its usual path with the testes becoming lodged in various abnormal locations. Five major sites of ET are perineum, femoral canal, superficial pouch, suprapubic area and contralateral pouch. In addition to these well recognized sites, preperitoneal, extracorporeal and the anterior abdominal wall ectopic testes have been reported (3).

Testicular descent can be described in two phases, the transabdominal and the inguinoscrotal. During the inguinoscrotal phase, the testis may deviate from the normal path of descent and migrate to an abnormal location; this is called ectopic testes. If the testis cannot be palpated in the usual position or in the groin near the external inguinal ring, all the probable sites for an ET should be meticulously examined. ET is a rare congenital anomaly and remains a urologic curiosity. Since John Hunter reported the first case of ET in 1786, less than 200 cases of ET have been published in the literature (4,5,6). Different hypotheses have

been proposed regarding etiologies of ET. It is felt to be either the result of hormonal imbalance between androgen and calcitonin gene-related peptide (CGPR), or the result of an aberrant gubernacular stabilization due to an anomaly at its distal end, or possibly be caused by local mechanical obstacles blocking the normal descent (1). Ectopic testes are thought to be greater at risk of trauma, testicular torsion, subfertility and malignancy. Surgical correction of undescended testes is generally done at about 6 months of age to allow for spontaneous descent. If there is co-existing inguinal hernia, early intervention is needed to prevent hernia incarceration. On the other hand there is no need to delay surgery in ectopic testis because possible descent as seen in undescended testis will not occur. Surgery is indicated even if there is no hernia present to minimize the insult to the testes(7).

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