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Ectopic Testis in an Unusual Location

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Abstract:

Ectopic testis is an uncommon condition. During the inguino-scrotal phase of descent, the testis may deviate from the normal path. Malposition of testis in an abnormal location is called ectopic testis. The common sites for ectopic testes are the superficial inguinal pouch, perineum, opposite side of the scrotum, femoral canal, and pubo-penile region. In addition to these, rare cases of pre-peritoneal, extracorporeal and anterior abdominal wall ectopic testes have been reported. We report a case of ectopic testis located near the anterior superior iliac spine, probably the first of its nature to be ever reported.

Key words: Testis, Scrotum, Penis, Perineum, Cryptorchidism, Humans.

Introduction

Ectopic testes are relatively uncommon as compared to undescended testes. When present in an uncommon location as anterior abdominal wall, they pose a diagnostic dilemma for the clinician, though ipsilateral empty scrotum/ scrotal hypoplasia are unmistakable clues. These testes never descend spontaneously and are prone to trauma due to their abnormal location. Hence early inguinal orchidopexy is recommended to prevent mechanical and functional complications.

Case Report

A two months old boy was brought to the outpatient department when his mother noticed a painless swelling in his right groin a week ago. A single oval swelling, was visible just inferior and medial to right anterior superior iliac spine [Fig.1]. The swelling measuring 3x2 cm was felt in subcutaneous tissue. It was firm, non-tender and to a certain extent movable in all directions. The right scrotum was empty and underdeveloped. The other testis was descended and the penis was normal. A diagnosis of right ectopic testis was made and confirmed by local ultrasonography. At exploration [Fig.2], the testis was found near the anterior superior iliac spine, the gubernaculum tethered to the fascia covering the external oblique muscle. The testis and the cord structures after exiting the external ring were found taking a hairpin bend before reaching its abnormal ectopic location [Fig.3]. Standard inguinal orchidopexy was done using dartos pouch technique. Adequate cord length could be achieved with virtually no mobilization. At six weeks post-

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operative follow up, the baby was asymptomatic and the testis was found located in the right scrotum.

Discussion

Normal testicular development and descent is a complex process. It can be described in two phases: trans-abdominal and inguino-scrotal. During the inguino-scrotal phase, the testis may deviate from the normal path of descent and migrate to an abnormal location. Malposition of the testis outside the line of normal descent is called ectopic testis. Five major sites of testicular ectopia are perineum, femoral canal, superficial pouch, suprapubic area and contra lateral pouch [1-5]. In addition, pre-peritoneal [6] and the anterior abdominal wall ectopic testes have been reported [7]. In our case, the ectopic testis was located in subcutaneous tissue of anterior abdominal wall infero-medial

Fig.1: Right ectopic testis located inferomedial to anterior superior iliac spine. Also notice hypoplastic right scrotum.

Fig.2: Hairpin bend of the cord after exiting the external ring and location of right testis close to iliac spine (marked by haemostat).

Fig.3: Gubernacular attachment to external oblique fascia inferomedial to anterior superior iliac spine.

to anterior superior iliac spine. During our search of English language medical literature, we have not come across such a location of ectopic testis reported earlier.

The cause of testicular ectopia is not yet completely understood and over the years, many theories have been proposed to explain the condition, from the famous hypothesis of the 'Tails of Lockwood' [8] to more recent ones involving the role of genito-femoral nerve [9,10]. In the case presented herein, how and why the testis along with its cord structures should take a hairpin bend after coming out of the external ring and get lodged below the anterior superior iliac spine is inexplicable.

Ectopic testes are thought to be greater at risk of trauma, testicular torsion, sub-fertility and malignancy. However, conclusive evidence is lacking. Surgical correction of undescended testes is generally done at about six months of age to allow for spontaneous descent. In cases of ectopic testes however, there is no need to delay surgery because the descent as seen in undescended testis will never occur [11].

References

1. Concodora JA, Evans RA, Smith MJV. Ectopic penile testis. Urology. 1976;8:263-264.
2. Ameh EA, Amoah JO, Awotula OP, Mbibu HN. Scrotoshisis, bilateral extra-corporeal testicular ectopia and testicular torsion. Pediatr Surg Int. 2003;19:497-498.
3. Middleton GW, Beamon CR, Gillenwater JY. Two rare cases of ectopic testis. J Urol. 1976;115:455.
4. Golladay ES, Redman JF. Transverse testicular ectopia. Urology. 1982;19:181-186.
5. Stirk DI. Strangulated inguinofemoral hernia with descent of the testis through the femoral canal. Br J Surg. 1955;43:331-332.
6. Murphy DM, Butler MR. Preperitoneal ectopic testis: a case report. J Pediatr Surg. 1985;20(1):93-94.
7. Rao PL, Gupta V, Kumar V. Anterior abdominal wall: an unusual site for ectopic testis. Pediatr Surg Int. 2005;21:687-688.
8. Lockwood CB. Development and transition of the testis, normal and abnormal. J Anat. 1888;22:505-541.
9. Sophie S Nightingale, Yasir R Al Shareef, John M Hutson. Mythical 'Tails of Lockwood'. ANZ Journal of Surgery. 2008;78(11):999-1005.
10. Hutcheson JC, Snyder HM 3rd, Zuñiga ZV, Zderic SA, Schultz DJ, Canning DA, Huff DS. Ectopic and undescended testes: 2 variants of a single congenital anomaly? J Urol. 2000;163:961-963.
11. Celayir AC, Sander S, Eliçevik M. Timing of surgery in perineal ectopic testes: analysis of 16 cases. Pediatr Surg Int. 2001;17:167-168.