Contents lists available at ScienceDirect

Urology Case Reports

journal homepage: www.elsevier.com/locate/eucr

Functional medicine

Perineal ectopic testis: A rare congenital anomaly

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ARTICLE INFO

Keywords: Perineal ectopic testis Congenital anomaly Diagnosis Orchiopexy

ABSTRACT

Perineal ectopic testis is a rare condition seen in less than 1% of all cases of undescended testis. In this study, we diagnosed a perineal ectopic testis in a 7-month-old physical examination. A solitary, oval mass on the lower and lateral side of the palpation right hemiscrotum was identified and this mass was defined as the correct testicle at the ultrasound of scrotal. Orchiopexy was performed following herniography, and the scrotum was attached to the scrotum using the dartos pouch technique. We believe that orchidopexy is the preferred treatment of choice.

Introduction

Ectopic testis refers to the testis entering a location other than the scrotum after passing the inguinal canal. It usually derives from overdevelopment and lengthening of a segment of the gubernaculum or from obstruction of the entrance to the scrotum.¹ Diagnosis can easily be made through physical examination of the ectopic regions and an empty scrotum. Imaging techniques such as ultrasonography and tomography may rarely be required. Surgical relocation of the testis into a normal intrascrotal position represents the basis of treatment, and the operation must be performed between the ages of six and 12 months.

Case presentation

A seven-month-old patient was brought to the urology clinic by his family due to absence of the right testis. Inspection revealed swelling toward the perineum in the lateral part of the right hemiscrotum (Fig. 1). Physical examination revealed weak maturation of the right hemiscrotum. The contralateral testis was in the left hemiscrotum, and the texture and size were within normal ranges. Palpation revealed a solitary, oval mass in the lower and lateral part of the right hemiscrotum. This mass was identified as the right testis at scrotal ultrasound. Surgery was advised. A right inguinal incision was made, and the testis was dissected as far as the gubernaculum. The gubernaculum was not strongly attached to the perineal structures, but was quite thick. The vas deferens and vascular structures were longer than in a normal testis (Fig. 2). A hernia sac was observed when the tunica vaginalis was opened. Orchiopexy was performed following herniography that means the hernia was ligated for repair, and the testis was attached to the scrotum using the dartos pouch technique (Fig. 3). Additional circumcision was also performed.

Discussion

The development of the testes and their descent from the abdomen to the scrotum is a complex, multi-stage process. The testes are known to undertake this migration under the influence of andrological hormones and various mechanical factors. Any disturbance in this process is known as genuine undescended testis (cryptorchidism) when in the normal route, and as ectopic testis when the testis enters an abnormal path. While the cause of ectopic testis is not fully clear, it has been thought to involve overdevelopment and elongation of one segment of the gubernaculum, genitofemoral nerve anomalies, or an obstruction in the entrance to the scrotum.²

The ectopic testis may be in the superficial inguinal pouch, the femoral region, the suprapubic region, the opposite side of the scrotum, or in the perineal region.¹ It is most common, at a rate of 75%, in the superficial inguinal pouch. Perineal ectopic testis, first described in 1786 by John Hunter, is a rare anomaly constituting less than 1% of all cases of undescended testis.³

Diagnosis is easily established based on an empty scrotum and swelling in the perineal region. Palpation of the testis also facilitates diagnosis. Due to our patient's young age, the empty scrotum and swelling immediately below were easily visible. The case was easily identified as perineal ectopic testis at physical examination. Location represents the only difference between perineal ectopic testis and undescended testis. Since our patient was very young, the testis was present as a swelling beneath the right hemiscrotum and had not fully descended to the perineal region. Delayed diagnosis and surgery can lead to complications such as atrophy, torsion, and cancer, and to infertility in bilateral cases.^{4,5} The incision would be made different ways such as inguinal or scrotal.^{4,6} On the other hand, inguinal incision would be considered since accompanying hernia may occur in these patients.^{4,6} Our patient also had a hernia sac, and herniography was

https://doi.org/10.1016/j.eucr.2019.100853

Received 23 January 2019; Received in revised form 17 February 2019; Accepted 19 February 2019 Available online 21 February 2019

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Fig. 1. Swelling toward the perineum in the lateral part of the right hemiscrotum.



Fig. 2. Clinical appearance: The vas deferens and vascular structures are longer than in a normal testis.



Fig. 3. The appearance after orchiopexy.

performed. The right testis was easily positioned in the right

hemiscrotum, since the spermatic cord and vessels were of sufficiently length.

Conclusion

Ectopic perineal testis is a rare disease and the diagnosis can easily be made by physical examination of ectopic regions and an empty scrotum. Occasionally, imaging techniques such as ultrasound and tomography may be required. Orchiopexy is the right treatment option, usually giving good postoperative results and must be performed as soon as these patents are diagnosed. Empty scrotum in the newborn period must be well evaluated, and if the testis is absent must be well assessed the perineal region should also be examined.

Conflict the interest statement

None of the authors have conflict of interest regarding the subject presented in the article.

Source of finance

During this study, no financial support was received from any company.

Informed consent

The patient has given written consent for this case report.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.eucr.2019.100853.

References

- Soomro S, Mughal SA. Perineal ectopic testis: a rare encounter in pediatric Surgical Practice. J Coll Physicians Surg Pak. 2008;18:386–387.
- 2. Hutcheson JC, Snydr 3rd HM, Zuniga ZV, et al. Ectopic and undescended testes: variants of a single congenital anomaly? J Urol. 2000;163:961.
- Mazneikova V, Marko D. Antenatal ultrasoun diagnosis of perineal ectopic testis. Eur J Ultrasound. 2001;13:31–33.
- Lee HR, Lee YS, Kim HS, Lee JY, Kim JC, Koh JS. A comparison between single scrotal incision orchiopexy and the inguinal approach in patients with palpable undescended testes distal to the external inguinal ring. *Korean J Urol.* 2009;50:1133–1137.
- Dieckmann KP, Due W, Fiedler U. Perineal ectopictestis. Urologe. 1988;27:358–362 1988.
- Feng S, Yang H, Li X, et al. Single scrotal incision orchiopexy versus the inguinal approach in children with palpable undescended testis: a systematic review and metaanalysis. *Pediatr Surg Int.* 2016;32:989–995.