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CASE REPORT

Idiopathic Penile Epidermoid Cyst in a Young Patient: Three-Year Follow-Up

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ABSTRACT

Twenty six-year-old male patient admitted to the urology outpatient clinic with a three-year history of a penile mass with slow-growing, mobilized and soft characteristic. Laboratory findings and the past history of the patient were normal. Dimensions of 3 x 2 x 2 cm cystic mass was found in superficial penile ultrasonography. Cystic mass was removed under local anesthesia. Pathological examination was reported as epidermoid cyst. There was no recurrence of the patient during a three-year follow-up period.

Key words: *Penis, Epidermoid cyst, Median raphe cyst*

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ÖZET

Genç Bir Hastada İdiyopatik Penil Epidermoid Kist: Üç Yıllık Takip

Yirmi altı yaşında erkek hasta polikliniğine üç yıldır yavaş büyüyen, hareketli ve yumuşak özellikte penil kitle yakınması ile başvurdu. Hastanın özgeçmişi ve laboratuvar incelemeleri normal idi. Yüzeyel penil ultrasonografide 3 x 2 x 2 cm boyutlarında kistik kitle saptandı. Lokal anestezi altında kistik kitle çıkarıldı. Patolojik inceleme epidermoid kist olarak rapor edildi. Hastanın üçüncü yıl takibinde nüks saptanmadı.

Anahtar kelimeler: *Penis, Epidermoid kist, Median rafe kisti*

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INTRODUCTION

Epidermoid cysts may arise from all parts of the body, but penile epidermoid cyst is uncommon and usually does not present any symptoms. The etiology of these lesions is unknown, and they can be either congenital or acquired[1]. We report on a case with penile epidermoid cyst and describe the diagnostic and management options.

CASE REPORT

A 26-year-old man presented to the urology outpatient clinic with a three-year history of a slowly growing penile swelling. An elastic, mobile and painless mass was located on the left dorsolateral side of the penile shaft (Figure 1). The patient's medical history including history of trauma, inflammation, urinary tract infection, hematuria, and dysuria and a review of systems was otherwise unremarkable. A thorough physical and abdominal examination was normal except for the penile lesion. Blood workup for kidney and liver function tests, urinalysis and urine culture were also normal. Superficial penile ultrasonography showed the presence of a well-defined cystic structure (3 x 2 x 2 cm in diameter) that appeared to be separated from the erectile tissue. Excision of the cyst was performed under local anesthesia. Complete excision began from the dorsolateral circumcision line. Macroscopically, the mass appeared to be full of a dense clear material, and both cytology and culture were reported as negative. The pathology report revealed the final diagnosis as penile epidermoid cyst. Histopathological examination of the specimen showed that the wall was lined with stratified squamous epithelium and laminated keratin (Figure 2). There has been no finding of recurrence during a three-year follow-up period.

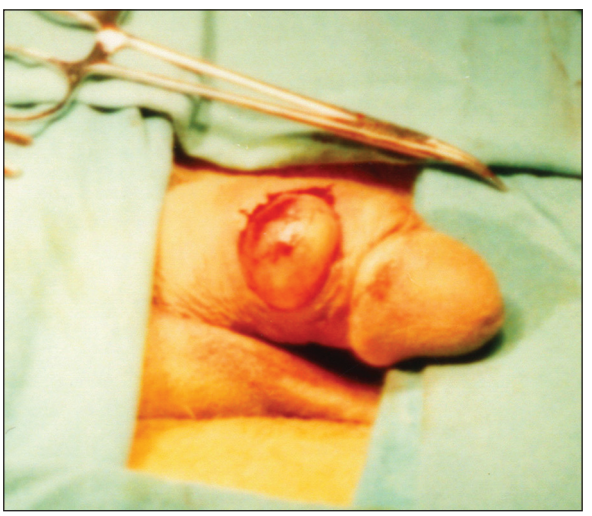

Figure 1. View of the mass located on the left dorsolateral penile shaft.

DISCUSSION

In the medical literature, the term epidermal inclusion cyst has been used interchangeably with epidermal cyst and epidermoid cyst[2]. Although the etiology of penile epidermoid cyst is unknown, some reports have stated that this lesion may arise from abnormal embryological closure of the median raphe or may be acquired after mechanical implantation, such as that involving injection of epidermal fragments[3-5]. Penile epidermoid cysts have been reported after hypospadias repair, penile girth enhancement surgery and circumcision[2,6]. Some authors have suggested that median raphe cysts are a different entity from epidermoid cysts. Most researchers believe that median raphe cysts are the sequelae of an error in the embryologic development of the male genitalia[7]. The cyst in our case did not originate from the median raphe based on its location.

Penile cystic diseases can occur in varying size and length, and they are usually solitary, only rarely being multifocal. The differential diagnosis of cystic structures in the genital region includes urethral diverticula, urethrocutaneous fistula, steatocystoma, dermoid cyst, and teratoma. Careful examination and/or radiologic evaluation are important in order to eliminate these entities[8]. Malignant transformation of penile epidermoid cyst epithelium has not been reported to date[1-5,8]. Treatment indications are: secondary infection, pain during intercourse, cosmetic reasons, or urinary tract obstruction. The best treatment procedure is complete excision[1,2,6]. Aspiration and simple drainage can not be recommended due to

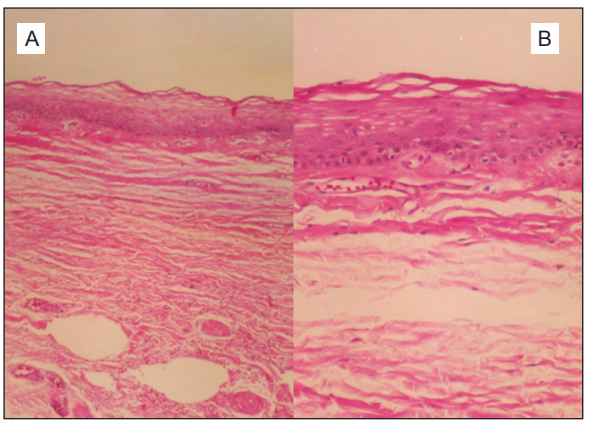

Figure 2. Histopathological view of the specimen (H&E, A: x40, B: x100).

the risk of recurrence. It should be kept in mind that recurrences are seen after partial excision[9]. Observation may be the best option after surgery.

REFERENCES

1. *Suwa M, Takeda M, Bilim V, Takahashi K. Epidermoid cyst of the penis: a case report and review of the literature. Int J Urol 2000; 7: 431-3.*
2. *Okeke LI. Epidermal inclusion cyst as a rare complication of neonatal male circumcision: a case report. J Med Case Reports 2009; 3: 7321.*
3. *Shah SS, Varea EG, Farsaii A, Fernandez R, Richardson C, Schutte H. Giant epidermoid cyst of penis. Urology 1979; 14: 389-91.*
4. *Laurenti C, De Dominicis C. A cyst in the penis of a child. Br J Urol 1978; 50: 213.*
5. *Khanna S. Epidermoid cyst of the glans penis. Eur Urol 1991; 19: 176-7.*
6. *Park HJ, Park NC, Park SW, Jern TK, Choi KU. Penile epidermal inclusion cyst: a late complication of penile girth enhancement surgery. J Sex Med 2008; 5: 2238-40.*
7. *Claudy AL, Dutoit M, Boucheron S. Epidermal and urethroid penile cyst. Acta Derm Venereol 1991; 71: 61-2.*
8. *Little JS Jr, Keating MA, Rink RC. Median raphe cyst of the genitalia. J Urol 1992; 148: 1872-3.*
9. *Kawai N, Sakagami H, Awata S, Kojima Y, Tatsura H, Sasaki S. Epidermoid cyst of the scrotum: a case report. Acta Urol Jpn 1996; 42: 609-11.*

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