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Parameatal urethral cyst of the glans penis in a boy

Bir erkek çocukta glans penisin parameatal üretral kisti

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Summary

Parameatal urethral cyst is a very rare benign condition in boys. A 11-year-old boy with parameatal urethral cyst of the glans penis is presented. On examination, a spherical cystic mass about 0.8 cm in diameter was found at the external urethral meatus. There was no history of trauma, local subjective symptoms, or application of topical medications. The diagnosis was made by physical examination alone. Complete surgical excision was performed as outpatient procedure. During the excision of the cyst, no external communication with the urethra was noted. Histologically, the cyst wall was lined by a columnar pseudo-stratified epithelium.Good cosmetic results with no recurrence were obtained. We think that complete surgical excision may be necessary to obtain good cosmetic results without recurrence.

Key words: Parameatal urethral cyst, penis, diagnosis, treatment.

Özet

Parametal üretral kist erkek çocuklarda nadir görülen bir durumdur. Glans peniste parameatal üretral kisti olan 11 yaşındaki erkek çocuk sunulmaktadır. Hastanın yapılan fizik muayenesinde, eksternal üretral meatusta 0.8 cm çapında sferik bir kist saptandı. Hastanın hikayesinde travma, lokal subjektif semptomlar yada topikal ilaç uygulaması yoktu. Tanı sadece fizik muayene ile kondu. Hasta komplet cerrahi eksizyon ile ayaktan tedavi edildi. Kistin eksizyonu sırasında, kist ile üretra arasında herhangi bir bağlantı görülmedi. Histolojik olarak, kist duvarı kolumnar psödo-stratifiye epitel ile döşenmişti. Nüks olmaksızın iyi kozmetik sonuç alındı. Hastada, nüks olmadan iyi bir kozmetik sonuç elde etmek için komplet cerrahi eksizyonun gerekli olabileceğini düşünmekteyiz.

Anahtar Kelimeler: *Parameatal ürethral kist, penis, tanı, tedavi.*

Introduction

Parameatal urethral cyst is a very rare entity in boys. The etiology of parameatal urethral cyst is unclear, but it may occur secondary to imflammation.(1) Parameatal urethral cysts are usually asymptomatic, however sometimes they can cause some variety of symptoms including poor cosmetic of the genitalia, dysuria, difficulty in urination and acute retention.(2-4) Surgical excision has been advocated for treatment of this situation,(2-3) but spontaneous regression, needle aspiration and marsupialisation have also been reported. (3,5,6)

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Here in, parameatal urethral cyst in a boy is presented because of its rarity, diagnosis and management of this situation is discussed with relevant literature.

Case Report

A 11-year old boy presented with a painless, slowly growing mass of the glans penis, which had been noted eight months previously. On examination, a spherical cystic mass about 0.8 cm in diameter was found at the external urethral meatus (Figure 1).

There were no urinary symptoms, polyuria or stream distortion. There was no history of trauma, local

subjective symptoms, or application of topical medications. No inflammatory signs were present. Blood count, blood chemistry, urine analysis and urine culture were normal. The boy was scheduled for surgical excision as outpatient procedure. Informed consent was provided from the patient. Under local anaesthesia, complet excision was performed. During the excision of the cyst, no external communication with the urethra was noted.The postoperative period was uneventful. Histologically, the cyst wall was lined by a columnar pseudo-stratified epithelium (Figure 2). Good cosmetic results was obtained without meatal stricture and urine flow problems after the surgical excision. No recurrence was observed at 6-month follow-up.

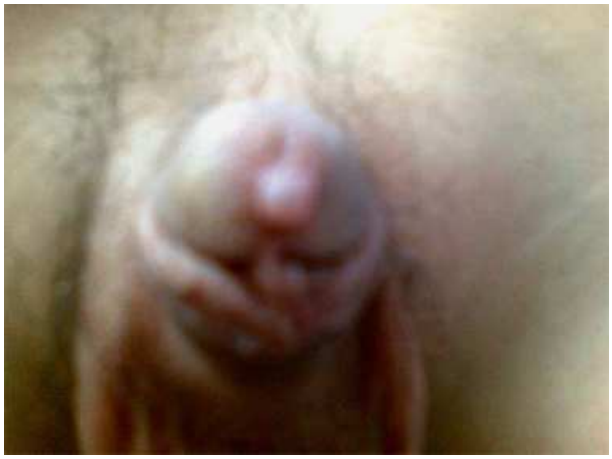

Figure 1. Parameatal urethral cyst of the glans penis

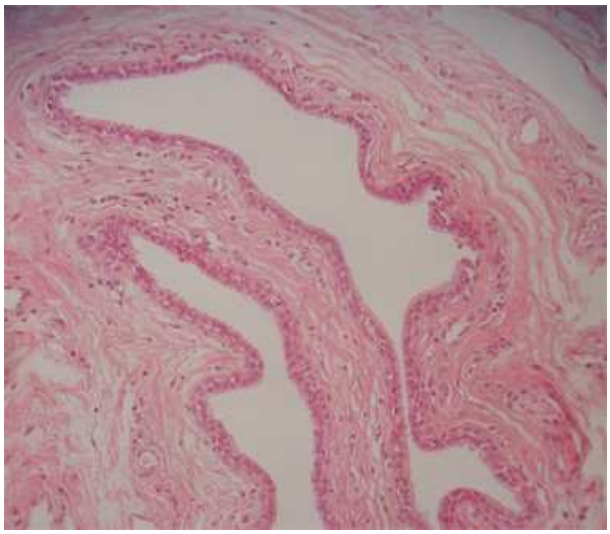

Figure 2. Cyst lined by pseudo-stratified columnar epitehelium (H&E, x20)

Discussion

Parameatal urethral cyst is a very rare lesion in boys and they can also be in infants, girls and adults. Only a few boys with parameatal uretral cyst have been described to date in English literature(2,3). Usually paraurethral cysts are asymptomatic, but, occasionally, patients may have dysuria, difficulty in miction and acute retention (2,4). The cysts are usually small, measuring about 1 cm. It may be congenital or appear spontaneously (1). Similarly, in this case, the lesion was about 0.8 cm in diameter, asymptomatic and appeared spontaneously. The etiology of paraurethral cyst is unknown completely, but it may occur due to obstruction of paraurethral ducts secondary to enfection in adults (1). Recently, Soyer et al.(7) reported two female newborn cases with paraurethral cysts associated with vaginal bleeding and breast enlargement. These associations raise the question of whether estrogens play a role in the development of paraurethral cyst. In this case, no etiologic factor was found. The etiology of paraurethral cyst is still obscure in boys, and this issue needs to be investigated in the future studies.

There is no consensus on diagnosis of paraurethral cyst. Some author reported that most of paraurethral cysts can be diagnosed by physical examination alone (8). In contrast, Blavias et al.(9) advocated voiding cysto-urethrography for ruling out urethral diverticula when a paraurethral mass is encountered on physical examination especially in adult women. In this case, the diagnosis was made by physical examination alone. We think that radiological imaging tests may be unnecessary to make diagnosis in boys.

The management of paraurethral cyst is controversial. Waiting for spontaneous rupture, needle aspiration, marsupialisation, and complete surgical excision have been reported for the treatment of the cyst.(2,3,5,6) Spontaneous rupture is rare in boys, and the duration of conservative management is not clear. Recurrence can be seen after spontaneous rupture or aspiration, (3,6) and satisfactory cosmetic results may not be obtained. Marsupialisation of the cyst may be cosmetically unsatisfactory, and recurrence can also be seen.(6) However, good cosmetic results with no recurrence has been reported with complete surgical excision (2,3,8). In the present case, duration of existence of the cyst was enough for conservative management, and the boy had not experienced spontaneous resolution of the cyst during this period. Additionally, when the cyst is traumatized, it may bleed, rupture or become infected. Therefore, complete surgical excision was performed,

and good cosmetic result was obtained without recurrence.

Histologically, the cyst wall may be lined by columnar, squamous or transitional epithelium (3,8,10). The lining epithelium actually varies according to the to the segment origin of the urethra of the lesion, Similarly, in the present case, the cyst wall was lined by a columnar pseudo-stratified epithelium. Some of the cells showed apical eosinophilic secretion. Histochemical features of the cyst epithelium was not investigated because it needs specific histochemical staining. It may be not necessary because it is not clinically significant as all cysts are managed in a similar fashion.

As a result, only physical examination may be enough to make diagnosis, and complete surgical excision may be necessary to obtain good cosmetic results without recurrence.

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