Congenital parameatal urethral cyst in male: A case report and review of literature

Amit Kumar Sinha a,*, Bindey Kumar b, Anil Kumar c, Manish Kumar Singh d, Prem Kumar e

a AIIMS Patna, India
b Department of Paediatric Surgery, AIIMS Patna, India
c Department of Surgery, AIIMS Patna, India
d Department of Paediatrics, AIIMS Patna, India
e Department of Radiology, AIIMS Patna, India

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Abstract

Parameatal urethral cyst is a rare clinical entity. Benign and usually asymptomatic, these cysts have limited mention in available medical literature. We report a case of parameatal urethral cyst in an 8 year old male child presenting with dysuria and treated with complete surgical excision.

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Parameatal urethral cyst is a benign cyst. The aetiologypathogenesis of these cysts is uncertain. Usually asymptomatic, these cysts may be brought to clinical attention due to stream disturbances, dysuria or for cosmetic reasons. We report a case of paraurethral meatal cyst in an 8 year old male child due to its rarity; pertinent review of the literature has been presented alongside.

1. Case report

An 8 year old male child presented with a painless, cystic swelling on glans penis. Parents of the child reported that the swelling was first noted at around 1 year of age; which has since slowly enlarged to become more prominent and cosmically unacceptable. There was associated complaint of dysuria for the past 1 month. There was no complaint of stream distortion. Clinical examination documented a spherical cystic mass of about 1 cm in diameter adjacent to external urethral meatus (Fig. 1). Intra-op it was noted that the cyst was impinging on posterior urethral wall. Surgical excision of the cyst was performed ensuring complete removal of the lining epithelium. Postoperative period was uneventful and good cosmetic result was obtained.

2. Discussion

Parameatal urethral cyst is a rare clinical entity. It was first reported as recently as 1956 by Thomson and Lantin [1]. There is paucity of case reports of parameatal urethral cyst in Indian population [2,3]. The aetiopathogenesis of these cysts is a matter of much debate. Thomson and Lantin [1] in their report attributed the formation of parameatal urethral cysts to the process of delamination of foreskin from glans. Shiraki [4] however was of the view that occlusion of paraurethral duct leads to cyst formation. This view was endorsed by Oka et al. [5] and Yoshida et al. [6] in their work. Hill et al. [7] added that the occlusion of paraurethral duct may be as a result of infection.

These cysts are usually small of about 1 cm in diameter and occur on the ventral or lateral margin of urethral meatus. They can present at birth or any time in the childhood. Both congenital and spontaneously appearing cysts have been described [4–7]. Usually asymptomatic, these cysts are mostly brought to clinical attention for poor cosmesis but dysuria, urinary retention and stream distortion may be possible presentations. They usually manifest...
clinically at 1 year of age. In our case the cyst was of congenital origin and measured 1 cm in diameter at diagnosis.

Various treatment modalities such as watchful wait for spontaneous rupture, needle aspiration, marsupialisation and complete surgical excision have been described as possible treatment options [8,9]. However, spontaneous resolution by rupture is rare in boys and is used only in neonates but the duration of watchful waiting for spontaneous rupture has not been described. Further, there are report of recurrences following spontaneous rupture and needle aspiration. Marsupialisation suffers from drawback of unsatisfactory cosmesis. Complete surgical excision of cyst is, therefore, treatment of choice as it produces good cosmetic results and recurrences are unheard of.

Differential diagnosis of parameatal urethral cyst are fibroepithelial polyp, juvenile xanthogranuloma, other cystic lesions like epidermoid cyst, pilosebaceous cyst etc.

3. Conclusion

A parameatal urethral cyst is a rare but benign clinical condition of uncertain etiology. Diagnosis is made by physical examination only and complete surgical excision produces good cosmesis without recurrence.

References