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Parameatal Urethral cyst: A case report

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Abstract
A parameatal urethral cyst is a very uncommon clinical entity. These benign cysts are rarely mentioned in the current medical literature and are typically asymptomatic. Few occurrences of cyst formation in the parameatal region have been documented in the literature, making it a rather uncommon occurrence. We describe a case of a parameatal urethral cyst in a 6-year-old male child who presented with urinary stream distortion and was completely surgically removed to prevent a recurrence.

Keywords: Cyst, excision, external meatus, parameatal swelling, recurrence

Introduction
Parameatal urethral cysts are one of the rare benign cysts commonly seen in males. It usually presents in early childhood but congenital cases have also been reported. They were first described by Thompson and Lantin in 1956 and since then, around 100 cases have been reported in the literature [1, 2].
Generally asymptomatic these-cysts can sometimes present with symptoms of urinary retention, dysuria, splaying of stream, and poor cosmesis [2]. Undermentioned is the case report of parameatal cyst in a 6-year-old male.

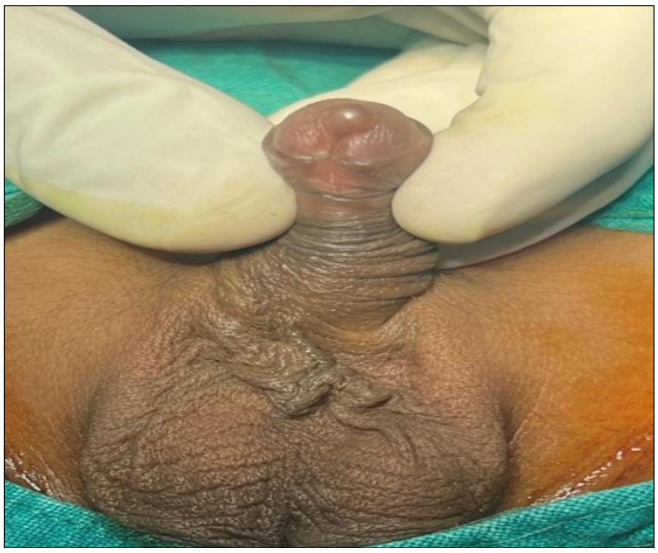


Fig 1: Parameatal Cyst

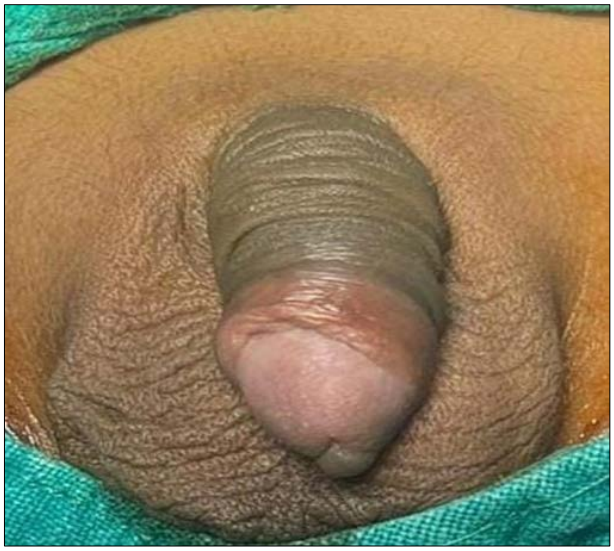


Fig 2: Parameatal Cyst

Case Report

A 6 year old presented to surgery OPD with chief complaints of painless, soft and cystic swelling on the glans penis. Mother of the child informed that the cyst was present since birth and has grown a little in size and causing distortion in the urinary stream.

Clinical Examination- One single cystic swelling spherical in shape was noted on the left lateral aspect of glans penis. It was 5-6 mm in size (Fig 1 and fig 2). It was found that Eosinophil count of the patient was high (7). He was given Tab Albendazole 400mg for 3 days and additional to that syp Allegra. The Eosinophil count was repeated after 4 days and it was within normal range to proceed for the Surgery.

Complete Surgical excision of cyst was done under General Anesthesia. (Fig 3) Intra-operative and post-operative period was uneventful. Three months of follow up showed no recurrence and the patient was asymptomatic with a good urinary stream.

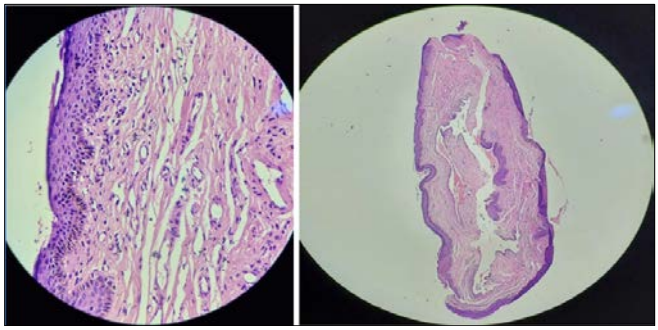
Fig 3 postoperative picture of urethral meatus after cyst excision and suturing.

Discussion

Parameatal urethral cyst is a rare clinical condition. There is paucity of case reports of parameatal urethral cyst in Indian population [2, 3] The aetiopathogenesis of these cysts is not very clear. Thompson and Lantin in their report accredited the formation of parameatal urethral cysts to the process of delamination of foreskin from glans. Shiraki [4] proposed that occlusion of paraurethral duct leads to cyst formation. This view was endorsed by Oka *et al*. [5] and Yoshida *et al*. [7] in their work. Hill *et al*. [8] added that the occlusion of paraurethral duct may be as a result of infection.

Standardly these cyst are reported to be small <1 cm in diameter and present on venteral or lateral margins of the external urethral meatus [4, 7] they can be present at birth or any time during childhood. Congenital and spontaneously occurring cysts both have been described. Generally asymptomatic these cysts may present with dysuria, distortion of urine stream, poor cosmesis. Histologically PUCs have been classified into three types: urethral (lined by stratified columnar, cuboidal or transitional epithelium), epidermal (lined by squamous epithelium) and mixed cysts [5]. Differential Diagnosis for parameatal cyst include fibroepithelial polyp, juvenile xanthogranuloma, epidermoid cyst and pilosebaceous cyst.

Different treatment options have been described such as waiting for spontaneous rupture [6], aspiration by a needle, marsupialization [9] and complete surgical excision. Reports of spontaneous rupture have been described, but this is very rare and mainly observed in neonates. Cases of recurrence have been reported in spontaneous rupture and needle aspiration [6]. Marsupialization have been reported to have poor cosmetic results. Hence, complete surgical excision has been the standard treatment of choice given that the cases of recurrence have yet to be noted [10, 11].



a) Microscopic picture (Hematoxylin & Eosin, 400x magnification) showing stratified squamous cell epithelial and pseudostratified columnar epithelial lining of the cyst wall, and
b) Microscopic picture (Hematoxylin & Eosin, 100x magnification) showing squamous cell epithelial lining the cyst wall.

Conclusion

Parameatal urethral cyst is a rare benign clinical presentation of unclear etiology. Clinical examination is required for making a diagnosis. Complete surgical excision is the treatment of choice for cosmesis and to prevent recurrence.

Ethics

Informed and Written consent was taken from the parents.

Authors' Contribution: A. and P.G. conceived and drafted the manuscript. V.G. and A.G. helped to draft the

manuscript. All authors' read and approved the final manuscript.

Conflict of Interests: There is no conflict of Interest.

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