

Para meatal urethral cyst: a rare condition

 Ankita Gupta,  Vidisa Bose,  Abhishek Kumar Singh

Department of Pediatric Surgery, Rajendra Institute of Medical Sciences, Ranchi, Jharkhand, India

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Corresponding Author: Abhishek Kumar Singh, drabhi678@gmail.com

ABSTRACT

There are very few documented occurrences of parametatal urethral cyst in the literature, making it an extremely uncommon benign disorder. These cysts may go away on their own and are typically asymptomatic. For patients who are exhibiting symptoms, surgical removal is required. Here, we describe the effective management of a child's parametatal urethral cyst with careful excision.

Keywords: Parametatal cyst, splaying, smegma pearl

CASE

A six-year-old child was referred from the pediatrics outdoor department for a cystic-like lesion on the urethral meatus tip. Upon local assessment, he exhibited a spherical cystic mass measuring 75x75 mm² near the lateral edge of the external urethral meatus (**Figure 1**). The cyst appeared to be filled with a serous to somewhat milky fluid, which made it easy to identify from a smegma pearl. The cystic mass was partially covered by preputial skin, which was incapable of being separated even with mild tearing. The penis appeared typical and was not hypospadias. His urinalysis showed no evidence of infection, and his urine stream was good with no splaying. Physical examination results were within normal limits. The kidneys and bladder appeared normal on an abdominal ultrasound. Excision of the cyst with meatoplasty was performed under general anaesthesia (**Figure 2**) and the tissue was sent for a histopathological examination. Histopathological examination showed (**Figure 3**) a cyst lined by stratified columnar cells and sub-epithelium had fibro collagenous tissues infiltrated with chronic inflammatory cells. The post-operative period was uneventful. He has been in follow-up for the last one year with no sign of recurrence.

DISCUSSION

The parametatal urethral cyst is an uncommon disorder. Thompson and Lantin² in 1956 first reported the case of parametatal urethral cyst. Currently, the number of cases described in the literature is less than 100.^{1,2} The majority of parametatal urethral cysts are asymptomatic. The cysts may form at any point in childhood or adulthood, or they



Figure 1. Parametatal urethral cyst



Figure 2. Excised cyst

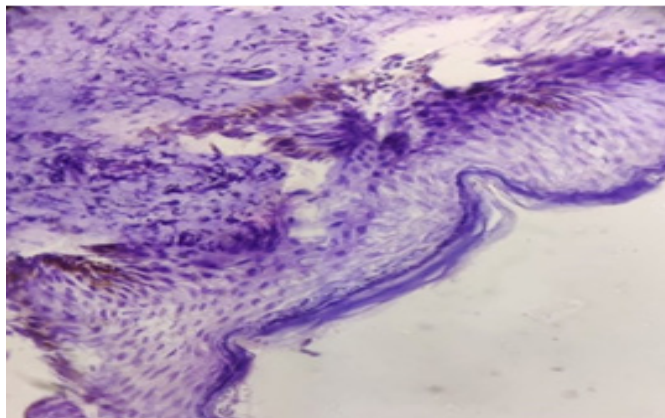


Figure 3. Histopathological examination

may be present from birth³, and they can occur in females⁴ and males, despite the fact that they often appear in males throughout their 1st year of life. The paramental cyst's etiology is not known. One probable explanation is that cystic spaces continue to exist throughout preputial delamination², development of cysts due to abnormal urethral fusion¹, or blockage of the paraurethral duct.⁵ Patients exhibit symptoms such as urine splaying, difficulties in voiding, and dysuria.^{1,4} Physical examinations are sufficient to diagnose the majority of paramental urethral cysts. Between 91.3% and 100% of cysts have a diameter of less than 1 cm^{1,4} and are situated either lateral or ventral to the meatus.⁶ It's critical to distinguish these cysts from skin tags, dermoid cysts, epidermal inclusion cysts, and cysts that are not found in the urethral meatus.⁴ The uncommon nature of paramental urethral cysts means that there are no established treatment standards. In 25% of cases, a paramental urethral cyst resolves on its own.^{1,4} Oka et al.⁷ explained paramental urethral cyst's spontaneous resolution in a neonate at four months. Surgical excision should be taken into consideration when cysts present symptoms. Surgical excision is an additional option for those whose cysts do not go away on their own after 24 months or who are worried about their appearance.⁴ After these cysts are surgically completely removed, there have been no instances of recurrence. However, simple aspiration or marsupialization of the cyst should be avoided as it may result in a recurrence or inadequate cosmesis.⁸ We removed the cyst with good cosmesis in our case report.

CONCLUSION

Infants and newborns tend to have spontaneous clearance of paramental urethral cysts. Therefore, conservative care with routine follow-up is indicated; however, total surgical excision is the preferred course of treatment for symptomatic individuals seeking cosmesis.

ETHICAL DECLARATIONS

Informed Consent

The patient's parents signed a free and informed consent form.

Referee Evaluation Process

Externally peer-reviewed.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Financial Disclosure

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Author Contributions

All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

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