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Case Report

Surgical Treatment of a Paraurethral Cyst in A Young Woman: A Case Report

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Abstract

Female paraurethral cyst is rare. Its diagnosis is clinical, and its treatment is surgical. We report a case of a paraurethral cyst in a 24-year-old woman who had consulted for the management of a vaginal mass. She was able to benefit from surgical removal of the cyst. We will discuss the clinical, diagnostic, and therapeutic aspects of this rare entity.

Keywords: Paraurethral cyst; urethrocystoscopy; urine culture; abdominal ultrasonography

Introduction

Paraurethral cyst is a rare benign cystic condition. Its prevalence is estimated to be between 1 to 6%. It is quite common in patients aged 20 to 60 years [1,2]. The low incidence of symptomatic cases explains the rarity of surgical interventions undertaken. Therefore, the available literature contains few publications concerning the diagnostics, differentiation, and treatment of paraurethral cyst in women [3]. It is present under the urethra at the anterior vaginal wall. Paraurethral cysts are usually asymptomatic. The cyst usually presents itself as a soft, oval and mobile mass. Therefore, differential diagnosis of paraurethral tumor-like lesions should take urethral diverticula, ectopic ureterocele prolapse, leiomyomas, squamous cell carcinomas, neurofibromas, etc. [4]. Symptomatic paraurethral cysts are an indication for surgical treatment. We report a case of symptomatic paraurethral cyst in a young woman and discuss the clinical, diagnostic, and therapeutic aspects of this rare entity.

Case report

This was a married, nulliparous, nulligest patient, aged 24, seen in consultation for the management of a painless, non-impulsive vaginal mass evolving for 1 year associated with dysuria such as weakness of the micturition stream. and dyspareunia. The clinical examination in the gynecological position revealed a vulvar gap, a vaginal paraurethral swelling, the pressure of which was painless; a visible and patent urethral meatus and a clean perineum (Figure 1A). Palpation and compression of these cyst-like lesions caused no discharge from the external urethral orifice. The remainder of the somatic examination was unremarkable. Additionally, routine blood morphology and biochemistry tests were performed, as well as urine culture, and abdominal ultrasonography (Figure 1B).

Urethrocystoscopy did not detect any diverticular opening or a lesion with the urethral lumen. The diagnosis of a paraurethral

cyst was made. The patient underwent surgical resection of the cyst by vaginal approach. The anterior vaginal wall was incised longitudinally above the palpable lesion. Then the cyst was dissected carefully from the vaginal and urethral wall (Figure 1C) and was remolved in full (Figure1D). Urine drainage provided by Foley's catheter (CH16) into the urinary bladder was Foley's catheter was left in the bladder for 24 h. The length of hospitalization was 1 day. The postoperative course was simple, and the patient lasted up to 3 months. Control ureteroscopy revealed an intact urethra. Histopathology of the excised lesion confirmed the diagnosis of simple cyst lined with stratified squamous epithelium. No complications described were noted.

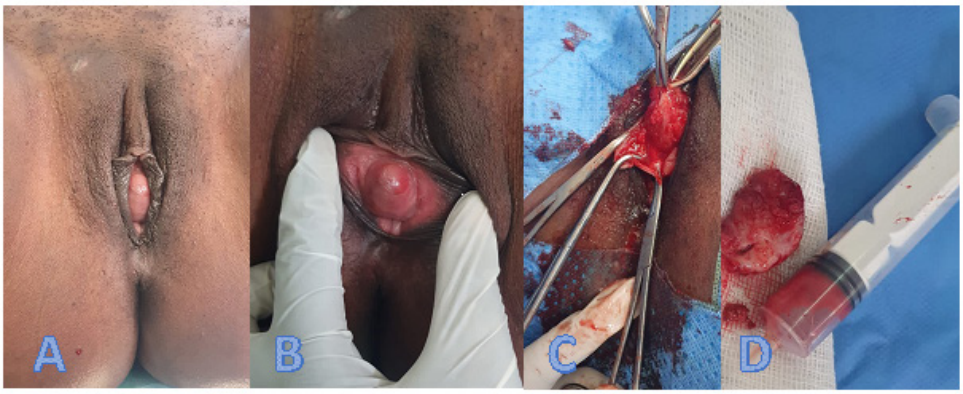

Figure 1: (A) vulvar swelling; (B) Paraurethral Cyst; (C) Surgical excision; (D) Cyst aspect on post-operative.

Discussion

Female Paraurethral cysts was estimated in 1-6%. It is quite common in patients aged 20 to 60 years. The reported case concerns a young woman without notable medical conditions. The female paraurethral cyst is rare and can be congenital or acquired [5-7]. A few cases of paraurethral cyst have been reported in infants. Congenital paraurethral cysts arise from the various embryological components and vestigial remains of the vagina and female urethra. The differentiation between paraurethral cysts with respect to their embryonal origin is currently unclear and seems to have no prognostic significance [8]. Classification of a cyst into a specific group is possible only after histopathological investigation of the excised lesion because of identification of the epithelial lining type.

For some authors [9,10] paraurethral cysts can be divided into 4 groups:

a) Cysts of Skene's gland or the paraurethral canal located most often proximally are lined with transitional epithelium.

b) Gartner's duct cysts are lined with cuboidal or low-column epithelium. They do not secrete mucus and are usually found in the anterolateral vaginal wall. They are generally asymptomatic.

c) Muller's cyst is lined with stratified squamous epithelium. It usually secretes mucus. It is symptomatic and occurs particularly in older subjects.

d) Acquired scaling cysts, usually small, represent the most common cystic lesion of the vagina. They are often asymptomatic, more common in the anterior and posterior wall. Acquired cysts are believed to be secondary to osbtetric trauma during childbirth or iatrogenic following surgery.

The clinical differentiation of these different cysts is difficult. In the literature, the clinical manifestations of the female paraurethral cyst are diverse and patients may consult for a sensation of endovaginal mass, dyspareunia, dysuria with weakness of the micturition stream and periodic pain in the region of the external genitalia [11-13]. In our case, the patient had urinary and genital symptoms. The diagnosis of paraurethral cysts is clinical. Endovaginal ultrasound, which was not performed in our case, could reveal a cyst with anechoic content. Differential diagnoses can be made with an ectopic ureterocele, urethral prolapse, urethral diverticulum or urethral tumor.

In our case, the diagnosis of the paraurethral cyst was clinical because the swelling was renitent, painless, visible, and palpable, allowing us to make the differential diagnosis with the suburethral diverticulum [14]. Several authors propose surgical treatment of symptomatic cysts. Which is the same in our case. Patients with the lesion localized near the proximal part of the urethra are at higher risk of developing the possibility of complications, such as: recurrence of the cyst, vesicourethral fistula, urinary incontinence [15]. Location of the cyst near the external urethral meatus, in the vicinity of the clitoris and vulva, potentially creates a risk intraoperative of damage to nerve terminals located in the erogenous zone, which may result in impairment of sexual sensitivity, or anorgasmia [16].

Conclusion

The paraurethral cyst is rare and its diagnosis is clinical. In the case of symptomatic paraurethral cyst, a simple surgical procedure leads to a complete cure. The results of this study are consistent with the few existing literature reports.

Declaration of Interests

The authors declare that they have no conflict interest for this article.

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None.

Ethical Considerations

A written informed consent was obtained for the publication of data and photos from the patient.

Author Contributions

All authors contributed to the development of this work. All authors read and approved the final version of the manuscript.

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