Case Report

Case Report: Prolapsed Ureterocele—A Differential Diagnosis of Urethral Cists

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Ureterocele is a cystic dilatation of submucosal distal ureter. It presents an incidence about 1/5000 to 1/12000 [1] and is higher in infants and young children and rare in adults and adolescents [2]. It is more frequent in women [1], and the presentation as urethral prolapse is extremely rare, appearing in only 5% of cases. [3] There are few cases in the literature presenting ureterocele prolapsed through the urethra, most of them in adult Caucasian women [3]. The diagnosis should be considered in young children presenting urinary tract infection in the first months after birth, Caucasian women with vulvar mass, urinary obstruction, and other urinary tract dysfunction associated [3].

1. Introduction

Ureterocele is a cystic dilatation of submucosal distal ureter. This condition presents an incidence about 1/5000 to 1/12000 [1] and is higher in infants and young children and rare in adults and adolescents [2]. It is more frequent in women [1], and the presentation as urethral prolapse is extremely rare, appearing in only 5% of cases. [3] There are few cases in the literature presenting ureterocele prolapsed through the urethra, most of them in adult Caucasian women [3]. The diagnosis should be considered in young children presenting urinary tract infection in the first months after birth, Caucasian women with vulvar mass, urinary obstruction, and other urinary tract dysfunction associated [3].

2. Case Report

A 45-year-old patient, a menopausal woman, sought medical attention complaining of a “mass” in the genital region (Figure 1). She reported long-standing dyspareunia and a 3-day evolution of heaviness in the pelvis and the exteriorization of a “mass” in the vulvar region, associated with episodes of intense urethral bleeding. She noticed progressive change in the mucosal coloration, presented fever, and reduced urinary frequency and volume. She denied associated dysuria. Her previous pathological history includes dyslipidemia and an obstetric history of three vaginal deliveries and one miscarriage. The physical examination showed tachycardia, pallor, and a necrotic/hemorrhagic aspect of the cyst originating in the urethra, not showing correlation with the vagina. A transvaginal ultrasound was performed, showing a heterogeneous oval image, located in the vulvar region, visible on physical examination, with debris and septations in the center, measuring 4.7 × 4.0 × 3.1 cm. She underwent armed cystoscopy and ureteroscopy in which there were no injuries in the urethra and no evidence of stenosis or diverticula. It was observed an ureterocele with necrotic area and dilated right ureteral ostium and ureter. There were no anomalies in the left ureteral ostium. The exam also showed bladder with sparse trabeculations. Therefore, it was decided to perform transurethral resection of ureterocele, bleeding point hemostasis, and biopsy of the mass. The procedure occurred without complications. Patient remained on a bladder catheter for 3 days after the procedure and evolved
most common in middle-aged females whom had previous obstetric trauma or frequent urethral infection [6]. Its symptoms include lower urinary tract disorder, dyspareunia, post-micturition dribbling and purulent urethral discharge (this last one being pathognomonic of urethral diverticulum, which can help us to distinguish the pathologies) [6, 11]. The diagnosis is basically considering the history and performing cystourethroscopy and urethrogram [11].

Another differential diagnosis is pelvic organ prolapses (POP), which is a “herniated vagina” containing one pelvic organ (bladder, rectum, or uterus) [12]. Although the urinary symptoms in the POPs are similar to the prolapsed ureterocele, such as sensation of heaviness in the pelvis, urinary urgency or frequency, voiding dysfunction, and others [13], we can distinguish from prolapsed ureterocele observing the prolapse from the vagina, not from the urethra, through pelvic examination with a Sims’ speculum or a bivalve speculum [13].

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Supplementary Materials

Description of cystoscopy: visualization of the urethra and left ureteral ostium of physiological aspect. Image after trans-urethral resection of the right ureterocele, where we see irregular margins with edema, in addition to an enlarged right ureter.

(Supplementary Materials)

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