

**CASE REPORT****FORMATION OF A PRIMARY STONE IN THE ANTERIOR VAGINAL WALL: A CASE REPORT****Samera F AlBasri\***

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**ABSTRACT**

Formation of a primary vaginal stone within an anterior vaginal wall cyst is a rare condition. In this report, we present the case of a 60-year-old woman with a primary stone within a vaginal wall cyst. The patient, P4 + 0, had long complaints of vague urinary symptoms and appearing and disappearing vaginal mass that became persistent, harder, and painful in the last 5 years. The mass was found to be a vaginal cyst containing a stone. Subsequently, the stone of dimensions 2 × 2 cm. Thereafter, the patient showed good recovery. Therefore, a diagnosis of vaginal wall cyst should be considered in women with unexplained urinary symptoms.

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**INTRODUCTION**

Formation of a primary stone in the vaginal wall is a rare condition, particularly in the absence of a fistula and pelvic organ prolapse that would precipitate salts and lead to stone formation.

**Case Presentation**

A 60-year-old woman presented to the outpatient department with complaints of vague urinary symptoms, which she had since the age of 20 years. The symptoms included voiding dysfunction, and frequent post-void dribbling. She noticed a mass through the vagina that was increasing and decreasing in size along with occasional bleeding and discomfort during maturation and sexual intercourse. She previously resorted to traditional medicine, but to no avail. The patient had four uncomplicated pregnancies and normal vaginal deliveries, but the mass was never identified. She began menopause 5 years ago. Since then, she persistently felt the mass, and it was associated with painful maturation. She had no prior surgeries or any chronic medical diseases.

Clinical examination revealed a normal but atrophied vulva. On clinical pelvic examination, the anterior vagina wall showed the presence of a 2 × 2 cm-sized hard mass just 2 cm from the urethral meatus. No urine leakage or abnormal discharge was observed on compression. The mass was slightly tender, not fluctuant, and not fixed to the underlying tissue.

A differential diagnosis of urethral diverticulum or vaginal cyst was made. The patient underwent urethroscopy under spinal anesthesia and was found to have a normal urethra and bladder, with no evidence of inflammation or diverticulum and with no change in the mass size on fluid irrigation. Moreover, no evidence of urinary tract infection or renal stones was observed in the pre-operative workup.

The vaginal wall over the cyst was incised, and the stone of dimensions 2 × 2 cm was extruded and sent for chemistry analysis, which showed the presence of calcium oxalate. Further, no urogenital fistula was observed. The cyst wall was excised and sent for histopathology, which confirmed the presence of vaginal epithelium.

**Figure 1** Anterior Vaginal Wall cyst**Figure 2** Anterior Vaginal Wall cyst stone

## **DISCUSSION**

The first case of an anterior vaginal wall cyst containing a primary stone was reported in 2013 (1). The current case is the second case of this kind to be reported in the literature. Earlier cases reported included development of vaginal stones secondary to a urogenital fistula or in the presence of a prolapsed anterior vaginal wall (cystocele) or urethral diverticulum; in these cases, the stone developed as a result of urinary leakage and precipitation salts in the vagina (2,3,4).

A detailed history and careful clinical examination is sufficient in such cases, but does not eliminate the need for imaging study when the diagnosis is doubtful (5). Analysis of tissue and stone is crucial to confirm the diagnosis. The treatment approach via the vagina is considered safe and least invasive for a vaginal cyst, after ruling out concomitant diverticulum or fistula. Urethroscopy is an appropriate tool for examination of vaginal stones because it does not involve any radiological exposure that usually occurs with intravenous pyelography, cystourethrography, and computed tomography; in addition, it involves a much lesser cost than magnetic resonance imaging (6).

## **CONCLUSION**

women with unexplained urinary symptoms and a vaginal mass should be examined for the possibility of a vaginal wall cyst that could develop a stone within and worsen the symptoms in the long-term.

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