

## Giant Vaginolith – Case Report

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### ABSTRACT

**A case of giant vaginal stone secondary to vesicovaginal fistulae is presented. Vagina is a rare site for urinary stone formation. Vaginal stones are thought to be formed due to deposition of urinary salts in the vagina & clinical presentation is variable like difficulty in micturation & dyspareunia. Proper Vaginal examination can be helpful to make the diagnosis . Attention is paid especially in young gynecologists for the importance of 1<sup>st</sup> doing pelvic examination before carrying certain investigations & have a possibility of VVF with vaginal stone.**

**KEY WORDS: Vaginal stone. Outlet obstruction, Vesicovaginal fistula.**

### INTRODUCTION

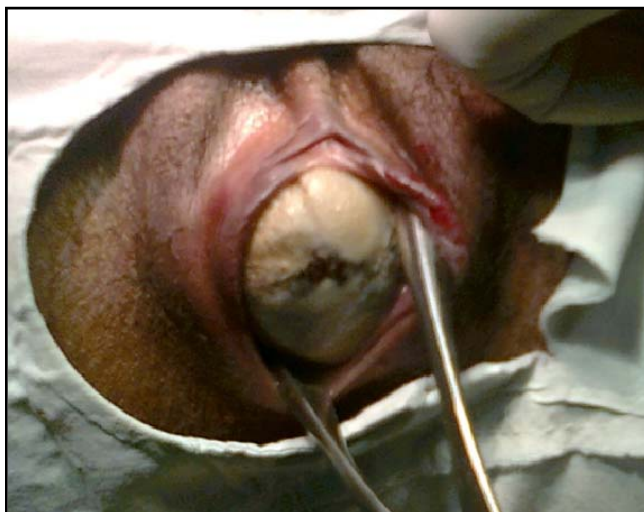
Vesicovaginal fistula with vaginal obstruction associated with vaginal calculus is an extremely rare medical condition<sup>1</sup>. Vaginal calculus acts as a foreign body & some time can grow larger enough to obstruct the whole vagina leading to profound pressure over the bladder resulting in urinary retention<sup>2</sup>. Vaginal calculi can be recognized as primary or secondary depending on the presence or the absence of a foreign body nidus. However primary vaginal stone are occasionally seen in gynecological practice & can be mistaken as large bladder calculi on plain radiograph<sup>3</sup>. Various etiological factors can be recognized which are responsible for primary vaginal calculi like vesicovaginal & urethrovaginal fistula congenital anomalies of the genitourinary tract or pelvis radiotherapy, neuropathic bladder & vaginal outlet obstruction. Secondary vaginal stone found around foreign body nidus are not so frequent.<sup>4</sup> It was postulated that the vaginal calculus usually originated from the stasis of urine through the fistulous tract in the obstructed vagina<sup>3</sup>. Various literatures are available to identify the composition of vaginal stones such as it can be made of magnesium ammonium phosphate, magnesium chloride etc<sup>5</sup>. But struvite calculi associated with vesicovaginal fistulas<sup>6</sup> here we describe the case of obstructed labor resulting in the formation Vesicovaginal fistula leading to urinary retention followed by giant vaginal stone formation.

### CASE REPORT

Mrs. XY 18 years old poor house wife presented to VVF gynecology clinic with history of off & on urinary retention & supra-pubic pain for last four days. She gave the history of urinary incontinence since the last one year after an obstructed labor resulting in still born. Her past medical history did not show any systemic illness. On General Physical examination she

was found to be apyrexial and normotensive looks dehydrated & malnourished with pulse rate of about 104/min. Abdominal examination revealed superficial & deep tenderness supra pubic region rest of abdominal viscera were not palpable. She was tender on vaginal examination, there was maceration and excoriation of the vulva involving the medial side of thighs & foul smelling due to persistent leakage of urine. On bimanual examination a stony hard mass found occupying the whole vagina. Laboratory examination revealed Hemoglobin. 8.0gms/dl, Urea and electrolytes were within normal limits. X-Ray of the pelvis showed a big opacified area in the pelvis. Her Ultrasound scan did showed mild degree of hydronephrosis with empty bladder. Once stable examination under general anesthesia done in operation theatre it revealed 5x5 cm irregular, yellow color stone impacted in upper part of anterior vagina, a VVF of 3 cm also present at urethrovesical junction involving the neck of bladder. A successful attempt was made to deliver it completely

**FIGURE I: A BIG VAGINAL STONE CAUSING VAGINAL OUTLET OBSTRUCTION**



**FIGURE II:  
SHOWING ISOLATED BIG VAGINAL STONE**



by using lithotripsy forcep after removal inner side of vagina was examined whole vaginal mucosa was very unhealthy due to pressure effect. Owing to the big size of the defect she was schedule for VVF repair. Her postoperative recovery after VVF repair was smooth.

### DISCUSSION

Vaginal calculus originates after urinary stasis in the vagina and concomitant infection<sup>6</sup>. The 1<sup>st</sup> case of vaginal calculus was reported by Halban in 1900 in patient with vaginal cystocele, since then lots of cases of vaginal lithiasis has been reported nationally & internationally<sup>7</sup>. The association of Vaginal stone with vesicovaginal fistula is not uncommon these stone are commonly associated with urinary symptoms like dysuria & urinary retention & vaginal outlet obstruction<sup>8</sup>. Here in our case poor women has large urinary fistula since her last birth due to true incontinence she developed a habit to hold urine inside the vagina which acts as a reservoir for urine stasis more over fragile infected tissue of the bladder and the vagina may have been a possible etiological factor for vesico-vaginal stone formation. It has been found in literature that Vaginal stone is always associated if vesicovaginal fistula is found at supratrighonal part of bladder<sup>9</sup> similarly in our case VVF is located at urethrovesical junction involving the neck of bladder. Other association of primary vaginal stones reported includes in a unmarried women with congenital vaginal septum as well as

in disable children's having neurological problems<sup>10, 11</sup>. They have also been reported after abdomino- perineal resection for carcinoma of rectum<sup>12</sup>. Primary vaginal stones are often mistaken for bladder calculi on plain radiography. However, intravenous pyelography and sonography can help differentiate between the two<sup>13</sup>. Emphasis should be taken in every VVF patient for through pelvic examination before necessary investigations & VVF repair in order to prevent recurrence. Our patient had made smooth post operative recovery on follow up visit.

### CONCLUSION

Undue intervention by untrained persons can lead to severe maternal morbidity and if left untreated leads to maternal death.

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