

**Research Article****VAGINOLITH - FINDINGS IN A PATIENT POST VVF****Rubina Singh, Karthik Chavannavar, Velmurugan Palaniyandi and Natarajan Kumaresan**

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Accepted 23<sup>rd</sup> May, 2023Published online 28<sup>th</sup> June, 2023**ABSTRACT**

Our objective is to report the case of a 37-year female, post VVF repair who had complaints of persistent dyspareunia. On evaluation, a rare finding of a 5x4cm vaginal calculus was identified secondary to a prolene suture which acted as a nidus.

**Key words:**

VVF, Vaginal calculus, Stones, vaginolith

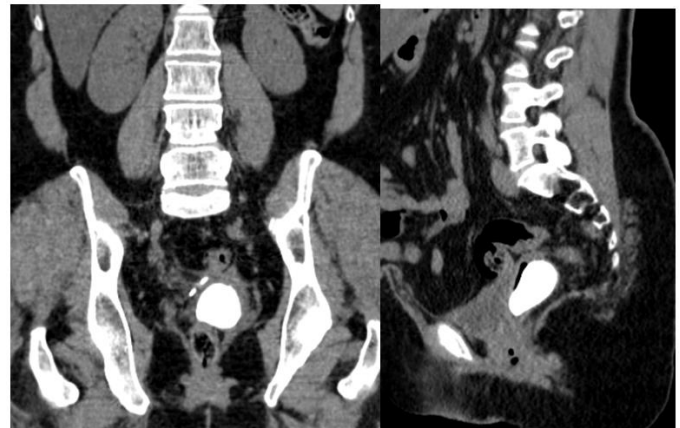
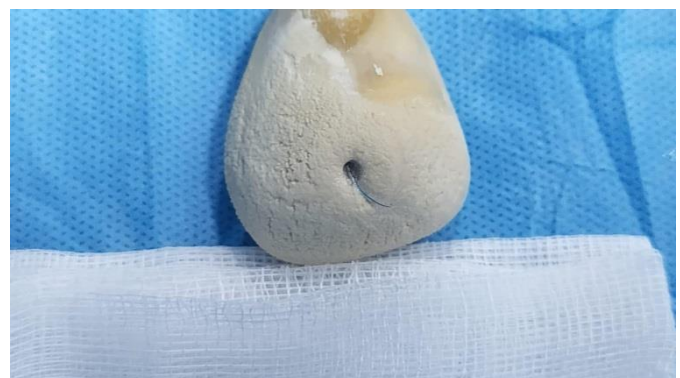
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**INTRODUCTION**

Vesicovaginal Fistulae (VVF) are common urogynaecological fistulae seen in developing countries following hysteric surgeries and obstructed labour. In developed countries, the leading causes of VVF are post-pelvic surgery, radiotherapy, and benign and/or malignant pelvic pathologies. (1) In cases with VVF, the urinary leakage or pooling results in the precipitated solutes being continuously flushed out of the urinary tract, hence the formation of a primary vaginal calculus is quite unusual. (2) As precipitation around a nidus (in our case a suture) persists, a calculus may hinder the fistula, increase the amount of stagnant urine inside the bladder, and further enhance encrustation(3). We present a 37-year female with a 5-cm vaginolith after diagnosis and treatment of VVF.

**Case Report**

A 37-year-old female underwent an Emergency Hysterectomy following profuse bleeding post-LSCS due to Placenta accreta. Postoperatively, the patient had a persistent urinary leak and was diagnosed to have a VVF. The patient underwent evaluation and then proceeded for VVF Repair 6 months later (O Connor's Technique) with uneventful postoperative recovery. Two years later, the patient came with complaints of persistent dyspareunia. Per vaginal and speculum examination was done, which revealed a Vaginal calculus approximately 2 cm from the introitus. To further characterise the calculus, Computed tomography was done (Figures 1A and 1B) which revealed no evidence of fistula and a 5cm vaginal calculus. We then proceeded for Cystoscopy with vaginoscopy under anaesthesia; Cystoscopy was performed and was normal.

**Figure 1A** Coronal and sagittal (1B) view showing vaginal calculus.**Figure 2** 5cm vaginolith with non-absorbable prolene suture in situ, which probably acted as a nidus.

Vaginoscopy revealed a 5cm calculus which was anchored to the vaginal wall with a palpable non-absorbable prolene suture (Figure 2) which was delineated, dissected and removed. It

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was noted that the suture acted as a nidus for the calculus formation. Catheter removal was removed 24 hours later, the patient voided well and had no urine leak. The postoperative period was uneventful. On follow-up, the complaint of dyspareunia was resolved.

## DISCUSSION

Vaginal calculus can originate secondary to urinary stasis and concomitant infection. (4) The 1st case of vaginal calculus was reported by Halban in 1900 in a patient with vaginal cystocele, since then further more cases of vaginal lithiasis have been reported internationally. (5) Urinary bladder calculi were found in 4 of 216 or 2% of cases of VVF by Lagundoye *et al*(6), whilst it was found in 7% of VVF cases evaluated radiologically by Akamaguna *et al* (7) The association between VVF and vaginal stone is not uncommon as these stones are commonly associated with urinary symptoms like dysuria, dyspareunia and urinary retention and vaginal outlet obstruction. (8)

## CONCLUSION

Although vaginal stones are rare, we must pay attention to this disease, especially in patients with post-fistula repair. Non-absorbable sutures are to be kept in mind during surgical repair as they might act as a nidus for stone formation. Obstruction of urine discharge combined with repeated urinary tract infections is also hypothesised to be the main cause of vaginal stone formation. In patients post-VVF repair, who complain of dyspareunia, a detailed vaginal and speculum examination should be undertaken to diagnose a vaginal calculus.

### Consent

Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

## Competing Interests

No conflict of interest is to be declared by the authors

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