Case Report

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A Rare Case of Vaginal Vault Endometriosis in a Post Hysterectomised Woman: A Case Report

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Abstract

Vaginal vault endometriosis, a very rare complication of hysterectomised women with a prior history of endometriosis or adenomyosis. We the case a case of a 42-year-old a multiparous woman who underwent hysterectomy for the erosion of cervix. She developed bleeding per vaginum after 3 years of surgery. On examination, around 2 cm growth was noticed on the vault. The entire growth was excised, and histopathology of the growth revealed endometriotic tissue suggestive of vault endometriosis. After the excixion of the growth, the patient reported no further episodes of bleeding. Injection Leuprolide acetate was given as maintenance therapy for 3 months.

Keywords: Vault Endometriosis; Post hysterectomy; Endometriosis; Abnormal vaginal bleeding; Dyspareunia.

INTRODUCTION

Endometriosis is a condition where normal appearing endometrial tissue is seen at extra-uterine sites, and it is usually a chronic, progressive and presents with a wide spectrum of symptoms ranging from asymptomatic to as severe as infertility and/or debilitating chronic pelvic pain. It affects around 10% of the women belonging to the reproductive age group.[1] It is also seen that the size of the lesions may or may not correlate with the severity of symptoms i.e., a small endometriotic deposit may present with severe pain, whereas moderate-to-severe endometriosis may be completely asymptomatic. The most common sites of endometriotic deposits are fallopian tubes, ovaries, Pouch of Douglas. (POD), rectovaginal septum, uterosacral ligaments.[2,3] Rare sites include cervix, episiotomy site, caesarean/surgical scar site, endometriosis, vault, distant areas.[4,5]

Multiple theories have been advocated for the cause of endometriosis, among which the most commonly accepted theory is the retrograde menstruation theory, where endometrial cells travel retrograde and get implanted into the peritoneal cavity.[6] Remnant ovarian syndrome may also be a causative factor in such cases.[7] Iatrogenic implantation of endometrial cells at surgical sites

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may also be a cause of endometriosis seen at abnormal or extremely rare sites such as episiotomy site, previous caesarean scar site, hysterectomy scar or vault. Vault endometriosis is a rare condition and can be recurrent if not identified early. It is also hypothesized that endometrial cells may have been deposited in the vault at the time of colpotomy. (Hysterectomy) or due to morcellation of a bulky uterus.[8] Leaving behind or incomplete removal of endometriotic tissue close to the vault i.e., from the uterosacral ligaments, POD may also be a cause for the development of vault endometriosis.[9] These patients usually present with persistent bleeding per vaginum, chronic pelvic pain, dyspareunia, dyschezia, dysuria even after hysterectomy. Definitive treatment is mainly complete excision and post-operative maintenance by high dose progesterone or gonadotropin agonist/antagonist therapy.[10]

CASE REPORT

A 42-year-old multiparous lady post hysterectomy, presented to us with complaints of bleeding per vaginum on and off for the last 10 years. She underwent hysterectomy 10 years back for cervical erosion. The histopathology of hysterectomised specimen was reported as. After

Fig. 1: Per speculum image showing vault endometriosis prior to excision

2 years of surgery, she had on and off prolonged bleeding per vaginum. She had been evaluated outside for the same, and diagnosed as vault granuloma after confirmation with biopsy of the vault growth. Her complaints did not subside, and she was on cyclical oral contraceptive pills on and off for the past 8 years. Her menstrual cycles were regular and there was no abnormal uterine bleeding, endometriosis or adenomyosis prior to hysterectomy. She was a known hypertensive and hypothyroid is on treatment. On examination, her vitals were stable, the general and systemic examinations were normal. On speculum examination, a mass of approximately 2x2cms was seen arising from the vault, which was bleeding on touch. Per vaginal examination, there was minimal tenderness in the vault. Diagnosis of vault granuloma was made and planned for excision of vault granuloma. Cytology of vault smear was negative for intraepithelial lesion/ malignancy. The vaginal vault growth was excised completely and sent for histopathology. (Fig. 1-3) The histopathology of the specimen was suggestive of vault endometriosis. Fig. 4 and 5). After complete excision, her symptoms were relieved and no further episodes of bleeding were noted. She received 3.75mg of leuprolide acetate once in a month for 3 months.

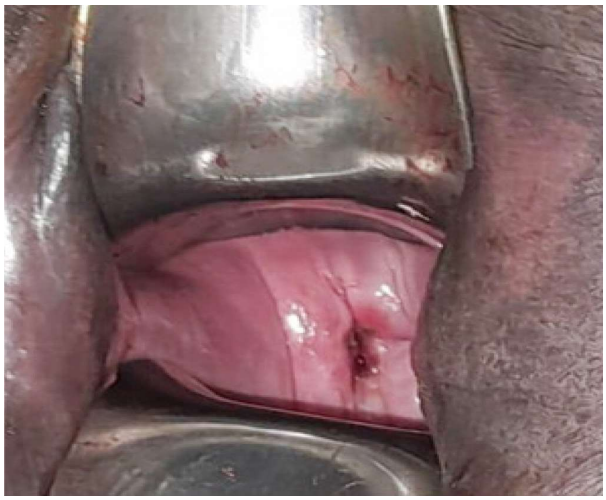

Fig. 2: Per speculum image of vault after excision of endometriotic tissue

Fig. 3: Per speculum image of vault after one month of excision

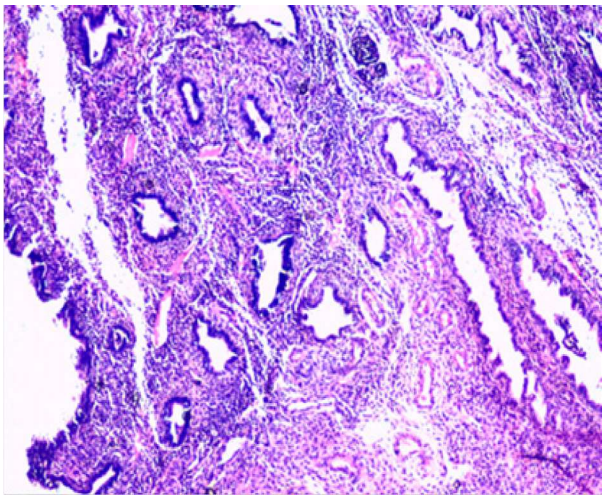

Fig. 4: Micrograph image showing endometrial glands and stroma (H & E, X 40)

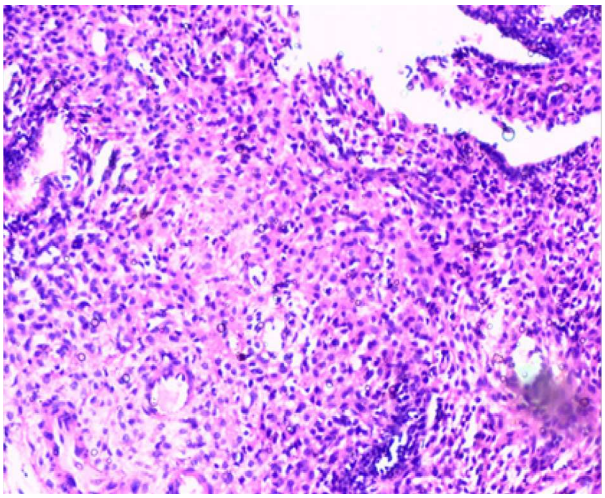

Fig. 5: Micrograph image showing decidualised stroma (H & E, X 200)

DISCUSSION

Vault endometriosis is a rare complication following hysterectomy and may affect post-operative quality of life significantly due to pain and persistent bleeding. They may present with only persistent bleeding or discharge per vaginum with or without pain. Among patients who underwent post-hysterectomy with or without bilateral salpingoopherectomy, those presenting with pelvic pain have been found to have higher chances of having definite endometriosis during laparoscopy. The risk of having endometriosis is even higher if they also had a history of endometriosis in the past or at the time of hysterectomy.[11] However, our patient had no past history suggestive of endometriosis or adenomyosis. She underwent hysterectomy for chronic erosion of the cervix. Vault endometriosis following hysterectomy with no past history of endometriosis is rare. Microscopic deposits which may have been missed during hysterectomy could have grown into new lesions over time, leading to new symptoms. Management of these lesions depends on the location, size, and if it has any intraabdominal component or infiltration into surrounding structures. Vault endometriosis is not a common complication and needs excision. However, it has a high rate of recurrence and needs strict post-surgery follow-up and suppression. Vault endometriosis may be external and/or internal, and based on its location and nature of adherence or invasion into nearby structures, the presentation may vary. As in our case, external vault endometriosis or vaginal cuff/ vault endometriosis may present with cyclical/ non-cyclical bleeding per vaginum, white discharge per vaginum, dyspareunia, abdominal pain, and malignant transformation in very are cases. Internal vault endometriosis is more commonly associated with pain and dyspareunia. A rare case was encountered where the vaginal cuff endometriosis infiltrated into the rectal mucosa and spontaneously ruptured, thus endangering life.[8] In our case, there was no infiltration of nearby structures and hence there were no bowel or bladder symptoms. Vaginal vault endometriosis may easily be missed if pelvic examination is neglected and patients may be subjected to unnecessary medications or there may be delayed definitive treatment, *i.e.* excision of the mass lesion. This eventually leads to morbidity and significantly affects the patient's physical, mental, sexual quality of life. Due to advances in surgical skills and the easy availability of good pelvic surgeons, there is a rise in the number of hysterectomies being performed for endometriosis and thus, rare cases like vault endometriosis are also rising.[12] Hence, it is essential to regular follow up-these women who may be at high risk and consider post operative therapy. Bleeding of any kind in a post-hysterectomy patient warrants clinical pelvic and/or radiological examination.

CONCLUSION

We emphasize that during hysterectomy if patients have features of endometriosis, it would be appropriate to consider post-operative gonadotropin agonists/antagonist therapy and advice regular follow up for earlier identification of cases of vault endometriosis. Pelvic examination including speculum examination for post-hysterectomised patients are advised

during their follow-up. Vault granuloma requires excision and maintenance therapy with high dose progesterone or gonadotropin agonist/antagonist for preventing recurrence.

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