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## Case Report

# Post hysterectomy fallopian tubal prolapse: a diagnostic dilemma

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## ABSTRACT

Fallopian tubal prolapse into the vaginal vault is a relatively rare postoperative complication after hysterectomy with adnexal preservation. The exact incidence is not known due to failure to diagnose and under-reporting. We hereby report a case who presented with unexplained vaginal bleeding post-hysterectomy, which was subsequently diagnosed and managed successfully.

**Keywords:** Case report, Fallopian tubal prolapse, Hysterectomy

## INTRODUCTION

Fallopian tubal prolapse into the vaginal vault is a relatively rare postoperative complication after hysterectomy with adnexal preservation. The exact incidence is not known as some cases might have resolved prior to detection. The reported incidence of this condition according to currently available literature is only 0.06%.<sup>1</sup> The rarity, relatively silent nature and failure to recognise the condition has led to under-reporting of post-hysterectomy tubal prolapse.<sup>2</sup>

## CASE REPORT

Mrs X, a 48-year-old female, presented to the gynaecology OPD with complaints of bleeding per vaginum on and off, for the past two months which was treated with oral Tranexamic Acid. The patient also had a history of watery white discharge per vaginum and dyspareunia. She also gave a history of spotting per vaginum after intercourse.

Obstetric history revealed a code of P2L2A2, with her last childbirth being a normal vaginal delivery 16 years ago. She had undergone a total abdominal hysterectomy 1 year ago at a private hospital elsewhere for abnormal uterine

bleeding. She stated that her postoperative recovery was uneventful. The details of her discharge summary and the final histopathology report of the hysterectomy specimen were not available.

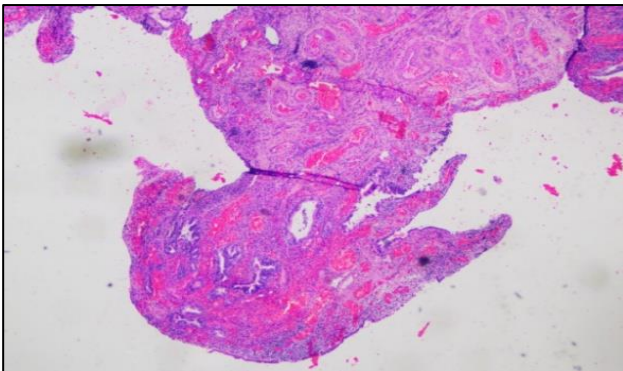
Examination of the abdomen showed a soft abdomen with a healthy scar. Per speculum examination revealed a polypoidal, strawberry coloured growth near the left angle of the vaginal vault, measuring 2.1×2.1 cm. There was slight bleeding on touch, and tenderness was present. A clinical diagnosis of a vaginal vault granuloma was made. Pap smear was negative for dysplasia/neoplasia; further investigations were ordered. Transvaginal ultrasound suggested a post hysterectomy status with a vault granuloma measuring 2.3×2.0 cm; both ovaries were normal in size and structure, and no free fluid was noted in the pelvis.

Subsequently, an excision biopsy of the granuloma was performed under local anaesthesia. During the procedure, a defect in the vault was noted, adjacent to the base of the granuloma, with some protruding yellowish fatty tissue which was also excised and sent for biopsy. Haemostasis was achieved by pressure packing, and the patient withstood the procedure well.

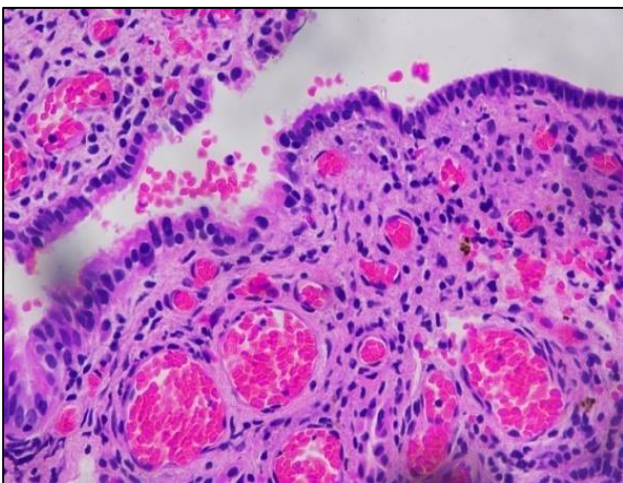
Biopsy was further sent for histopathological evaluation (HPE). Macroscopically, the specimen consisted of greyish-white and tan brown tissue bits with areas of haemorrhage. Another specimen showed fibrofatty tissue measuring 1.2×0.8×0.2 cm. Microscopically, the first specimen was part of the fallopian tube wall characterised by the outer muscle layer and the luminal mucosal folds lined by ciliated columnar epithelium. Tell-tale signs of inflammation were also present.



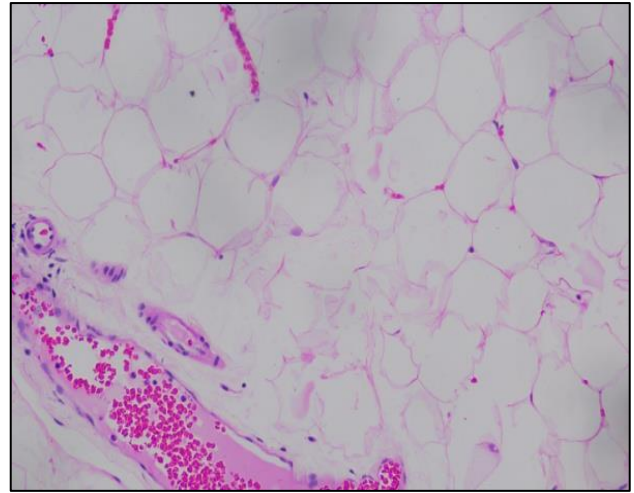
**Figure 1: Vaginal vault granuloma.**



**Figure 2: H and E staining: tubal plicae.**



**Figure 3: High-power H and E staining: ciliated columnar epithelium.**



**Figure 4: H and E staining: omentum.**

Section of the fibrofatty tissue showed lobules of adipocytes with haemorrhagic foci, and inflammatory cells suggestive of omental tissue. The final impression given was fallopian tube with an omental bit.

## DISCUSSION

Tubal prolapse is relatively rare (1 in 1100) in cases of hysterectomy with adnexal preservation, irrespective of the surgical approach used. However, rates are higher in vaginal hysterectomies as compared to abdominal hysterectomies.<sup>3</sup> Due to under-reporting and spontaneous resolution of these cases, the exact incidence remains hard to estimate.

The differential diagnosis for such a case should include postoperative granulation tissue, endometriosis, Adenocarcinoma and vesicovaginal and ureterovaginal fistulae.<sup>4</sup> Cases can present from 2 months after hysterectomy, to even as long as 8 years. The most common presentation is vaginal discharge associated with pain in the abdomen, but dyspareunia has also been reported.<sup>5</sup>

Vaginal cuff dehiscence is an extremely rare complication of hysterectomy which can cause tubal prolapse, sometimes associated with peritonitis or bowel ischemia. Predictive risk factors with regard to patient profile include low haemoglobin, low serum protein and immunocompromised state.

Quite a few intraoperative factors also contribute, namely the chosen type of surgery, the colpotomy technique, the method of cuff closure, and the suture material.<sup>6</sup> In some cases, excessive bleeding can obscure the surgeon's vision leading to improper vault closure. The bleeding also increases the chance of haematoma formation with subsequent infection, cuff abscess, cuff cellulitis and full-blown sepsis in severe case.<sup>7</sup> These risks are indeed amplified when the procedure is done in an improper OT setup, as is the case in large parts of third-world countries.

Post-operative factors like increased intra-abdominal pressure during chronic cough or severe constipation may also contribute to vault dehiscence.

The key to successful management of post-hysterectomy fallopian tubal prolapse is awareness of this rare complication and diagnosing the same. When in doubt, a biopsy helps and to prevent misdiagnosis of a vault carcinoma, immunohistochemistry (IHC) can be added. Subsequent management would be to excise the prolapsed tube namely a 'vaginal salpingectomy', the gold standard of diagnosis being HPE.<sup>5</sup>

If adhesions are suspected, or there is a technical difficulty, the procedure can be done under a laparoscopic guidance. Thorough haemostasis needs to be achieved and the vault has to be sealed with cryo-cautery or suturing.<sup>7</sup>

## CONCLUSION

Fallopian tubal prolapse post-hysterectomy is rare, but demands careful detection and immediate intervention. Clinicians must keep this in mind as one of the differential diagnoses, especially when dealing with post Hysterectomy vaginal bleeding, thereby minimising unnecessary interventions.

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