

# Excision of Remnant of Fallopian Tube at Vaginal Vault Mistaken for Granulation Tissue after Total Abdominal Hysterectomy: A Case Report

Wafa Alshahrani, Maysoun Aladham

Department of Obstetrics and Gynecology, King Abdulaziz Medical City, National Guard Health Affairs, Riyadh, Saudi Arabia  
Email: Wafa.a.shahrani@gmail.com

**How to cite this paper:** Alshahrani, W. and Aladham, M. (2025) Excision of Remnant of Fallopian Tube at Vaginal Vault Mistaken for Granulation Tissue after Total Abdominal Hysterectomy: A Case Report. *Advances in Sexual Medicine*, 15, 76-79. <https://doi.org/10.4236/asm.2025.153006>

**Received:** May 10, 2025

**Accepted:** July 4, 2025

**Published:** July 7, 2025

Copyright © 2025 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

Vaginal vault granulation is often observed following total abdominal hysterectomy. Although in most cases, such finding is considered benign, it does lead bothersome symptoms to the patients due to constant vaginal discharges or postcoital bleeding. In most cases, Silver Nitrate is used in a clinic setting to ablate the lesions. Unfortunately, it requires a few visits to the gynecologist for the symptoms to completely subside. Herein, we are presenting a case who developed vaginal lesion at the vault after four months from her surgery which was removed in the operating room under spinal anesthesia. Pathology report after the surgery showed the tissue to be part of the remaining fallopian tube rather than granulation tissue.

## Keywords

Remnant Fallopian Tube, Granulation Tissue, Vaginal Surgery, Total Abdominal Hysterectomy

## 1. Introduction

Vaginal vault granulation tissue is a common consequence post total abdominal hysterectomy. While some patients can be totally asymptomatic, others could present with vaginal discharges or postcoital bleeding. The treatment mostly focuses on excision of the lesion in the clinic using Silver Nitrate; however, such a method requires frequent sessions which are consuming for the patient's time and expenses [1] [2]. After reviewing the literature, there were no published cases discussing the finding of fallopian tube remnant at the vaginal vault after total ab-

dominal hysterectomy with bilateral salpingectomy. We are presenting a case of a 43 years old who a lesion noted at the vaginal vault removed surgically under spinal anesthesia to which the pathology report showed remnant of the fallopian tubes.

## 2. Case Report

43 years old, Nulliparous Lady, who is medically known to have hypothyroidism and dyslipidemia, presented to the gynecology clinic complaining of irregular menstrual periods and spotting for many months. Her surgical history is significant for Dilation and Curettage due to Endometrial hyperplasia without atypia one year prior to her clinic presentation. Her pathology report post-surgery was suggestive of Endometrial chronic inflammation. Endometrial Sample and PAP smear were taken. Pathology results came back as Endometrial hyperplasia without atypia and her PAP smear showed Low Grade Squamous Intraepithelial lesions (CNI I). Patient was counselled about the findings and agreed to proceed with Total abdominal hysterectomy with bilateral salpingectomy with preservation of the ovaries.

Surgery went smoothly and the patient was discharged after 2 days with a follow up in the clinic for pathology results. Patient was seen in the clinic and her pathology report was reviewed showing Focal endometrial hyperplasia without atypia and normal Fallopian Tubes. The patient was discharged from the clinic in stable condition. Four months after the surgery, the patient presented to the clinic again complaining of PV spotting. Speculum examination was done showing a lesion noted at the vaginal vault at 12 O'clock, measuring around 2 × 2 cm. The lesion was noted to be pink in color with no vascularization noted around it. The patient was counselled about the findings, along with the suspicion of the lesion being granulation tissue, and the need for excision to be done under anesthesia. The patient agreed and she was booked for surgery.

During surgery, the tissue was removed using cautery and sent for pathology. Surgery was straightforward. After the surgery, the patient was debriefed about the intraoperative findings and was discharged on the same day. Patient was seen after two weeks from surgery with the pathology report showing fibril end of the fallopian tubes noted with focal inflammation and ulceration. The patient was completely asymptomatic during her visit and was given a follow up in 6 months after the surgery.

## 3. Discussion

PV spotting after total hysterectomy requires further evaluation. Remnant Fallopian Tube Syndrome is an extremely rare medical phenomenon. Many cases were reported in literature describing Ovarian remnant syndrome to which the patient usually present with chronic pelvic pain after the hysterectomy which is mainly managed via surgical excision [3]-[5]. However, to our knowledge, there was only one case reported by Chaddha JS in 2000, where a patient presented after

4 years of the surgery with chronic pelvic pain. The patient had a vaginal hysterectomy, sparing both adnexa, for as a case of low-grade uterine carcinoma. After 6 years from the hysterectomy, the patient was complaining of chronic pelvic pain to which bilateral salpingectomy was done. Four years after the second surgery, the patient was still complaining of chronic pelvic pain and CT scan was showing solid right adnexal mass measuring 3 × 4 cm. Patient was planned for Diagnostic laparoscopy which was converted to laparotomy intraoperatively due to adhesions. The right adnexal cyst was successfully removed and sent for histopathology confirming the diagnosis of fallopian tube remnant with elements of chronic inflammation. The patient had an unremarkable hospital course and was discharged in stable condition [6].

In our case, there was no clear cause which made the patient at risk of having fallopian tube remnant. Her surgery was straightforward with no complications noted. There were no risk factors such as adhesions or poor surgical techniques making the patient more susceptible to having incomplete excision of the fallopian tube. Granulation tissue formation at the vaginal vault after abdominal hysterectomy is a common post operative complication. Patients tend to present with vaginal discharges or spotting while some are asymptomatic. The most commonly used treatment is cauterization with silver nitrate [2].

Although it is considered easy to perform, it is usually performed a few times before the symptoms start to improve causing a burden to the patient [2]. The best treatment for vault granulation is to prevent it from happening. One of the methods that can be performed is to close the vaginal vault instead of keeping it open [7]. Another method which is used for the closure of the vault is comparing using 0 Vicryl interrupted figure of eight compared to absorbable staplers. The incidence of forming granulation tissue was noted to be higher with interrupted stitches reaching up to 37% compared to the staplers reaching up to 18% [8].

A study was carried out by Fairlie and AlHussani was compared the usage of Lembert suture against the chromic catgut. The Lembert sutures were showing an incidence of 11% compared to 3% with the catgut [9]. N. Saropala, C. Ingsirorat in 1998 have reviewed the past published articles in the past decades and gave their input regarding the best method to minimize the chances of developing granulation tissue on the vaginal vault. Using sutures material such as Vicryl is preferred compared to chromic catgut. In addition, it is not yet clear whether closing the vault using interrupted stitches does decrease the chances of forming granulation tissues at the vaginal vault compared to continuous. It is not recommended to perform the Lembert suturing method as it requires specific training and is not practical for securing hemostasis [2]. Up to this day, there are no published articles stating excision of the granulation tissue as a form of treatment nor comparing it with other known methods such as silver nitrate cauterization.

#### **4. Conclusion**

In conclusion, the formation of granulation tissue is observed sometimes after to-

tal hysterectomy. Most cases are treated in the clinic using silver nitrate as a form of cauterization. No clear published comparison of the outcomes of silver nitrate cauterization compared to lesion excision. Such a new approach requires more studies looking at the best treatment for such cases.

### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

### References

- [1] Manyonda, I.T., Welch, C.R., Mcwhinney, N.A. and Ross, L.D. (1990) The Influence of Suture Material on Vaginal Vault Granulations Following Abdominal Hysterectomy. *BJOG: An International Journal of Obstetrics & Gynaecology*, **97**, 608-612. <https://doi.org/10.1111/j.1471-0528.1990.tb02548.x>
- [2] Saropala, N. and Ingsirorat, C. (1998) Conservative Treatment of Vaginal Vault Granulation Tissue Following Total Abdominal Hysterectomy. *International Journal of Gynecology & Obstetrics*, **62**, 55-58. [https://doi.org/10.1016/s0020-7292\(98\)00054-x](https://doi.org/10.1016/s0020-7292(98)00054-x)
- [3] Greenhalf, J.O. (1972) Vaginal Vault Granulation Tissue Following Total Abdominal Hysterectomy. *International Journal of Clinical Practice*, **26**, 247-249. <https://doi.org/10.1111/j.1742-1241.1972.tb04435.x>
- [4] Beresford, J.M. and Moher, D. (1993) A Prospective Comparison of Abdominal Hysterectomy Using Absorbable Staples. *Surgery, Gynecology & Obstetrics*, **176**, 555-558.
- [5] Fairlie, E.J. and Al-Hassani, S.S.M. (1973) The Lembert Suture in the Prevention of Vaginal Vault Granulation after Total Abdominal Hysterectomy. *BJOG: An International Journal of Obstetrics & Gynaecology*, **80**, 839-843. <https://doi.org/10.1111/j.1471-0528.1973.tb11229.x>
- [6] Chaddha, J.S., Dettmering, E.T., Love, B.R. and Mccorvey, R. (2000) Remnant Fallopian Tube Syndrome. *Journal of Gynecologic Surgery*, **16**, 47-50. <https://doi.org/10.1089/gyn.2000.16.47>
- [7] Kamprath, S., Possover, M. and Schneider, A. (1997) Description of a Laparoscopic Technique for Treating Patients with Ovarian Remnant Syndrome. *Fertility and Sterility*, **68**, 663-667. [https://doi.org/10.1016/s0015-0282\(97\)00315-4](https://doi.org/10.1016/s0015-0282(97)00315-4)
- [8] Howard, F. (1995) Laparoscopic Treatment of Ovarian Remnant and Ovarian Retention Syndromes. *The Journal of the American Association of Gynecologic Laparoscopists*, **2**, S20. [https://doi.org/10.1016/s1074-3804\(05\)80520-1](https://doi.org/10.1016/s1074-3804(05)80520-1)
- [9] Dionisi, H., Dionisi, J. and Dionisi, J. (1996) Laparoscopic Treatment of Ovarian Retention Pathology. *The Journal of the American Association of Gynecologic Laparoscopists*, **3**, S10. [https://doi.org/10.1016/s1074-3804\(96\)80161-7](https://doi.org/10.1016/s1074-3804(96)80161-7)