

**RARE CASE OF VAGINAL BLEEDING WITH A NORMAL VAULT FOLLOWING
SURGICAL MENOPAUSE**

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Abstract

Post Hysterectomy Causes of bleeding include atrophic vaginitis, vaginal vault granulation, prolapsed fallopian tube, cervical stump cancer, infiltrating ovarian tumors, estrogen secreting tumors in other parts of the body and rarely carcinoma of the fallopian tube. Endometriosis of the vault sometimes can cause postmenopausal bleeding. Post Hysterectomy complications at the vault site such as a bleeding incident can be commonly observed at a short-term post-operative period. Other delayed complications often occur as a hematoma, granuloma, keloid, incision hernia and or vascular formation at the vault. Many of these complications may be accompanied with bleeding symptoms. This case report describes persistent bleeding from vaginal vault 18 months following Hysterectomy.

Keywords: Surgical menopause, Vaginal bleeding, Hysterectomy.

Introduction

Endometriosis is defined as the presence of functional endometrial glands and stroma outside the usual location in the lining of the Uterine cavity(1-3). It occurs most commonly in the gynecologic organs and pelvic peritoneum but may frequently involve the gastrointestinal system, greater omentum, and surgical scars, while it is rarely found in distant sites such as kidney, lung, skin and nasal cavity.(4)Scar endometriosis, the presence of ectopic endometrial tissue at scar sites especially following gynecological abdominal surgical procedures like hysterectomy and cesarean section and in perineum after vaginal deliveries with episiotomy(5). Iatrogenic

Endometriosis has been described previously in case reports as a rare complication associated with Laparoscopic Hysterectomy and post abdominal surgery (scar endometriosis (6).Post Hysterectomy complications at the vault site such as a bleeding incident can be commonly observed at a short-term post-operative period. Other delayed complications often occur as a hematoma, granuloma, keloid, incisional hernia and or vascular formation at the vault. Many of these complications may be accompanied with bleeding symptoms. This case report describes persistent bleeding from vaginal vault 18 months following hysterectomy.

Case Report

A 34 yr old lady P2L2A1 (ectopic pregnancy) came on 24th May 2013 with bleeding off and on per vaginal following Hysterectomy did elsewhere 18 months back for DUB. She had multiple surgeries in the past like Laparoscopic surgery for Ectopic pregnancy in 2004, Appendicectomy in 2008, Open Myomectomy in 2011 and Total Abdominal Hysterectomy with Right Salpingo –oophorectomy in 2012. No details of findings of laparotomy were given in the discharge sheet. She had H/o post-operative vault infection following surgery.

On examination, mild but active bleeding from the vault with foul smell was seen. Per vaginal examination showed irregular vault with tender Left fornix. Ultrasound abdomen showed Uterus and Right Ovary absent and Left Ovary enlarged. HVS done in our OPD came out to be Staph aureus and patient was given appropriate antibiotics.

The patient came back again on 5th July 2013 with persistent spotting P/V associated with pain lower abdomen. On examination, active bleeding from the vault with foul smell was seen. Per vaginal examination, a mass 3.0x4.0cm felt in the Left fornix with tenderness. HVS was repeated and again the course of antibiotics was given according to culture sensitivity. Up negative, Serum Estradiol was 35pg/ml, CA 125 -08.6U/ml and CEA—1.97ng/ml. A provisional diagnosis of Infective Granuloma of the vault was made. The patient was counseled regarding the need for Diagnostic Laparoscopy and Vault Biopsy.

In view of several surgeries in the past, the patient wanted some time for spontaneous regression of the Granuloma.

The patient came back again with complaints of intermittent foul smelling spotting P/V with pain lower abdomen on 27th Aug 2013. Ultrasonography was repeated and showed Left Ovarian Haemorrhagic cyst of size 5.1x 4.0 cm. The patient was advised and counseled for laparoscopy. Meanwhile, appropriate

antibiotics and Oral Contraceptives were started with a provisional diagnosis of Chocolate Cyst. Patient disappeared and did not turn up for 6 months.

The patient came back again on 11th March 2014 with persistent bleeding P/V and pain abdomen. On examination, 6.0 x 7.0 cm mass felt on the top of vault of the vagina. The patient gave H/O Laparoscopic Aspiration of the Cyst and Vault Biopsy done elsewhere in this 6 months interval. The Biopsy report showed non-specific loss of surface epithelium and Sub –epithelial Haemorrhage. Though the diagnosis was uncertain Malignancy was ruled out. No definite endometriosis diagnosis was made. Finally patient agreed for Laparotomy. On Laparotomy, 4.0cmx3.0 cm Hemorrhagic cyst at Left Adnexal region along with Pelvic adhesions was present. There was a Zigzag tract in the Vault of Vagina which was covered with Adhesions. Probing through the vaginal vault revealed the tract with a flap of tissue covering the tract. Left Ovariectomy and complete resection of the tract was done. Finally, the vaginal vault was sutured.

Postoperative period was uneventful and the patient was discharged on the 3rd postoperative day. After 3 months of follow-up, patient was asymptomatic and has no symptoms like bleeding till date.

Discussion

Post Hysterectomy Causes of bleeding include atrophic vaginitis, vaginal vault granulation, fallopian tube prolapsed, cervical stump cancer, infiltrating ovarian tumors, estrogen secreting tumors in other parts of the body and rarely carcinoma of the fallopian tube (9,10,12) Endometriosis of the vault sometimes can cause postmenopausal bleeding (11).

Although rare, there have been few reports of vaginal vault endometriosis with patients presenting with irregular or cyclic menstrual bleeding several months or years after hysterectomy. However, those cases had a history of a functional endometriosis at the

ovaries with adhesions or a fistulous tract to the vault or even some endometriotic spots left behind near the vault site.

In cases of vault endometriosis, however, a preoperative diagnosis is difficult and most of them end up in a surgical procedure. If malignancy is ruled out, laparoscopic excision of the nodule is good choice (13)

Dr. Sampson in 1924 first published a paper describing endometriosis; viable endometrial tissue outside the uterus. However, the pathogenesis is still an enigma with many theories existing including retrograde menstrual flow and abnormal immune responses including the role of cell adhesion molecules in the binding of endometrial cells to the peritoneal lining (6). The current theories about the pathogenetic mechanism of endometriosis include:

1. A Metastatic theory, with the tubaric retrograde flow of menstrual endometrial tissue into the peritoneal cavity, advanced by Sampson in 1927. That seems to be the most widely accepted nowadays.
2. A Lymphatic and vascular spread of endometrial tissue, where for example, ovarian endometriosis is due to lymphatic spread (Ueki 91).
3. A Coelomic metaplasia, with the transformation of coelomic epithelium, present in various organs and tissues in the endometrial tissue under the influence of estrogens (Metzger 1991).
4. An Immunity system alterations where humoral antibodies to endometrial tissue, aromatase enzymatic expression, and various adhesion molecules appear to play an important role in the adherence of ectopic endometrial tissue implants (Zeitoun 1999).
5. A Surgical dissemination. Iatrogenic endometriosis is becoming increasingly common with more laparoscopic procedures being performed. Other operations which are associated with iatrogenic endometriosis include

caesarean section and abdominal hysterectomy (7,8)

There are studies supporting the incidence of endometriosis in post-hysterectomy women which have been negative in laparoscopy and in history [14].

Schram JD [15], reports on 1978, the occurrence of vagina's apex endometriosis 5 years after an abdominal hysterectomy and 4 years after bilateral oophorectomy with no evidence of endometriosis on surgery. Kuhlmann M [16], on 1995 reports two cases, and Gary E [17], on 2001, one case with two years lap time among hysterectomy and endometriosis focus on the vaginal cuff scar.

The patient described had no prior history of endometriosis nor Adenomyosis and therefore endometriosis of ovary with a communicating tract to the vault of the vagina could not be diagnosed early on presentation.

Our patient had persistent bleeding per vagina 2yrs following Hysterectomy because of Functional endometriosis at the Ovaries with Adhesions, Fistulous tract to the vault and Endometriotic spots left behind near the vault site at the time of Hysterectomy.

Conclusion

While dealing with patients presenting with post –hysterectomy vaginal bleeding. a differential diagnosis of vault endometriosis should be borne in mind. In our case patient had continued bleeding because of the paucity of diagnosis because of lack of proper operative notes of the Hysterectomy procedure done elsewhere, probably there was evidence of endometriosis. Non-closure of pelvic peritoneum could have helped the development of fistulous tract. Adhesions must have concealed the fistulous tract.

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