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■ Case Report

Cavernous Haemangiomatous Polyp of Uterine Endocervix: A Rare Cause of Recurrent Post Coital Bleeding and Intrapartum Haemorrhage- A Case Report

Ali MJ,[1,2] Salami OS,[2] Mashor MI,[3] Daru PH[1,2]

1Department of Obstetrics and Gynaecology, College of Health Sciences, Faculty of Clinical Sciences University of Jos, Nigeria. 2. Department of Obstetrics and Gynaecology, Jos University Teaching Hospital Jos, Nigeria. 3. Department of Pathology, Bingham University Teaching Hospital Jos, Nigeria

Correspondence:

Maryam J Ali
maryamjamila08@gmail.com,
alimj@unijos.edu.ng
+2348033803872

ABSTRACT

Background: Cavernous haemangioma of the uterine cervix is a very rare benign vascular tumour. Few cases have been reported to date; and among them only very few cases are associated with pregnancy. Although rare, it may cause obstetrical and gynaecological complications. **Case Presentation:** A 27-year-old woman initially presented with history of recurrent post coital bleeding and infertility. She later conceived and presented at term with antepartum haemorrhage. An emergency caesarean section was done in view of the excessive bleeding, with findings of polypoid tortuous vessels on the lower uterine segment that was clamped and excised. Histology revealed cavernous haemangioma. **Conclusion:** Cavernous Haemangioma should be kept in mind as a differential diagnosis by clinicians of recurrent post coital bleeding and antepartum haemorrhage as it may cause severe maternal and fetal complications.

Keywords: Cavernous Haemangioma, Post Coital Bleeding, Antepartum Haemorrhage, Endocervical Polyps, Jos Nigeria

INTRODUCTION

Haemangiomas are benign vascular tumors characterized by abnormal growth or accumulation of blood vessels in the skin or internal organs. They are broadly categorized into capillary, cavernous, arteriovenous, or mixed types, with capillary haemangiomas being the most common.[1,2] Cavernous haemangiomas, although less common, are typically found in internal organs and skin. However, their occurrence in the uterine cervix is exceptionally rare, especially during pregnancy. To date, only a few sporadic cases have been documented in the literature.[2]

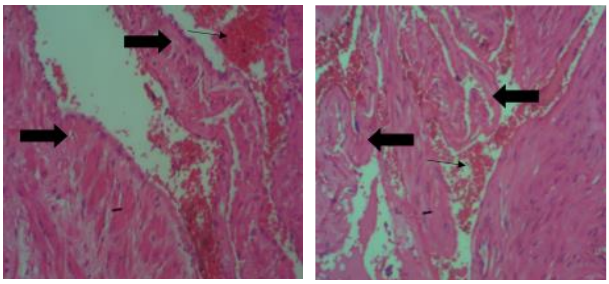
While most haemangiomas are congenital in origin, some may develop later due to angiomatous proliferation. Cervical cavernous haemangiomas may also arise from prolonged angiomatous changes in polypoid endometrial lesions. These lesions are often asymptomatic, but they can present with symptoms such as menorrhagia, postcoital bleeding (PCB), postmenopausal bleeding, dyspareunia, or infertility.[3,4,5] During pregnancy, they may lead to significant obstetric complications, including antepartum hemorrhage (APH), postpartum hemorrhage, premature rupture of membranes, intrauterine fetal death, and disseminated intravascular coagulation.[6] When present in the cervix, vagina, or other parts of the genital

tract, they can cause post-coital bleeding due to trauma to the fragile, vascular tissue during sexual intercourse.[7]
This case report describes a 27-year-old woman presenting with PCB and later developing APH at term, necessitating an emergency cesarean section. The findings of tortuous endocervical polypoid masses with cavernous haemangioma underline the potential for life-threatening complications associated with such rare lesions during pregnancy.

By reporting this case, we aim to increase awareness about the existence of cavernous haemangiomas of the uterine cervix as a potential cause of PCB and their capacity to present as APH during pregnancy. Recognizing and managing these lesions promptly is critical to prevent adverse maternal and fetal outcomes.

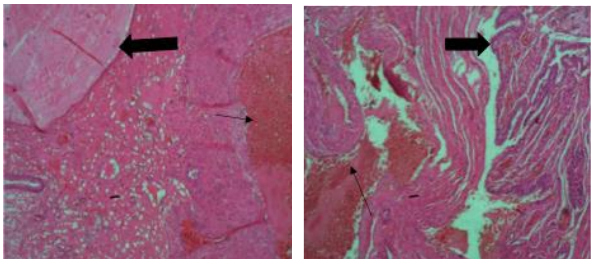
CASE PRESENTATION

A 27year old nulliparous woman presented to the gynaecological clinic with history of infertility and post coital bleeding, her menstrual cycle has been regular and of normal flow and duration. There was no history of use of hormonal contraceptives. Speculum examination of the cervix revealed a normal looking cervix, and pelvic ultrasound revealed no pathology.



a b

Fig 1a. and 1b show multiple tortuous dilated vascular channels (Thick arrows) containing blood (thin short arrows)



c d

Fig 1c. and 1d. show endocervical glands (thick arrow heads) adjacent to congested vascular channels (thin arrow heads)

High vaginal swabs and endocervical swabs taken revealed no abnormality. Papsmears was negative for intraepithelial malignancy. The patient was scheduled to have a colposcopy and directed biopsies if abnormal lesions were seen. She was lost to follow up.

The patient presented 3 months later with an 8-week pregnancy confirmed at Ultrasound. She was treated for threatened miscarriage at 8weeks of gestation and was placed on progesterone tablets, pregnancy was uneventful and subsequent ultrasound scans revealed a posterior fundal placenta.

She carried the pregnancy to term (40weeks) and presented to the labour ward in latent phase of labour. She was noticed to have excessive bleeding during her next review which became torrential. She was immediately planned for an emergency caesarean section for antepartum haemorrhage at term. Intraoperative findings included a healthy male baby that weighed 3.8kg with good Apgar scores. Tortuous endocervical polypoid masses were seen at the lower uterine segment. This was clamped and excised and sent for histology. The patient was transfused two units of whole blood. Histology revealed multiple proliferating dilated endocervical type glands with fibrocartilaginous stroma. There were multiple dilated thick and thin-walled vascular channels, no malignant cells were seen. Features in keeping with endocervical polyp with cavernous haemangioma.

DISCUSSION

Intrapartum haemorrhage is a critical obstetric emergency that poses significant risks to both maternal and fetal health. This case highlights the rare occurrence of cavernous haemangioma as the underlying cause of intrapartum haemorrhage in a 27-year-old woman presenting in labor.

Cavernous haemangioma of the lower uterine segment or cervix is an exceedingly rare benign vascular lesion, with only sporadic cases documented in the literature.[1] Typically congenital in origin, these lesions may remain asymptomatic or undiagnosed until they manifest through complications, such as abnormal bleeding during pregnancy or labour. In this case, the patient presented with acute intrapartum haemorrhage, necessitating an emergency caesarean section.

During the caesarean section, tortuous vascular structures were identified on the lower uterine segment, which were excised to control the bleeding. This immediate surgical intervention was life-saving and crucial for achieving haemostasis. Histological examination confirmed the presence of a cavernous haemangioma, characterized by dilated blood-filled vascular spaces lined by endothelial cells, consistent with the benign nature of the lesion.

Cavernous haemangiomas are known for their fragile vascular architecture, making them prone to rupture and significant bleeding under conditions of increased vascularity and hormonal influence, as seen during pregnancy.[2] Estrogen is thought to play a key role

in the development and exacerbation of these lesions by stimulating endothelial cell proliferation.

The lower uterine segment is a rare location for haemangiomas, but their presence in this region is clinically significant due to the potential for massive haemorrhage during labour, delivery, or surgical interventions. In this case, the combination of labour-associated uterine contractions and increased vascular pressure likely contributed to the rupture and subsequent intrapartum haemorrhage.

During her pregnancy, the patient presented at 8 weeks with a threatened miscarriage, which was successfully managed with progesterone supplementation.[8] Hormonal changes during pregnancy, particularly the influence of estrogen,[9] may have exacerbated the vascular fragility of the haemangioma, potentially contributing to both the early pregnancy bleeding and the subsequent intrapartum haemorrhage. Studies indicate that estrogen plays a significant role in haemangioma development, as endothelial cells in haemangiomas contain estrogen receptors.[9,10] Few cases of haemangiomas in pregnancy have been reported previously.[11,12,13]

The patient's prior history of recurrent postcoital bleeding (PCB) is particularly noteworthy, as it may, in hindsight, have been attributable to the cavernous haemangioma, even though initial evaluations were unremarkable.

PCB is a distressing symptom often linked to structural abnormalities, infections, or hormonal imbalances.[7] Previous studies reported a case of a multiparous women with a pedunculated polyp arising from the endocervical canal.[5,6] In this case, the patient underwent a Pap test, high vaginal swabs (HVS), and pelvic ultrasound, all of which returned normal results. These findings ruled out common causes of PCB, but they did not exclude rare vascular anomalies, such as cavernous haemangiomas, which are difficult to detect without advanced imaging or histological evaluation. With hindsight, the recurrent PCB may have been an early clinical manifestation of the cavernous haemangioma, particularly given its fragile vascular architecture and tendency to bleed with mechanical stimulation.

CONCLUSION

This case illustrates the importance of vigilance in managing PCB and its implications during pregnancy. While benign lesions like endocervical polyps and haemangiomas are rare causes, they can lead to significant obstetric complications. Early detection, close monitoring during pregnancy, and timely surgical intervention can optimize outcomes for both mother and baby. Future follow-up for this patient is essential to ensure no recurrence of polyps or haemangiomas.

Declaration of Patient Consent

Written informed consent was obtained from the patient for use of her clinical information and relevant images for publication. The patient understands that her name and other identifiers will not be published and all efforts will be made to conceal her identity.

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Conflict of Interest- There are no conflict of interest

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