Case Report

Placental polyp "An Unexpected Journey from Home Delivery to Hysterectomy"

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Abstract:

Placental polyp is a rare postpartum complication resulting from retained placental tissue that forms a polypoidal mass in the uterus after delivery or abortion. This case report describes a 30 year old woman who developed secondary postpartum hemorrhage (PPH) due to a necrosed myomatous polyp. She initially presented with excessive postpartum bleeding following a home delivery. Despite undergoing uterine evacuation and multiple blood transfusions, she continued to experience irregular per vaginal bleeding, leading to readmission. Ultrasonography revealed a mixed echogenic structure in the uterine cavity. On examination, a necrotic mass was found protruding through the cervical os, leading to emergency laparotomy. Due to severe adhesion and persistent hemorrhage, a total hysterectomy was performed. Histopathological analysis confirmed the diagnosis of a placental polyp. This case highlights the importance of considering placental polyp in patients with persistent postpartum bleeding and emphasizes the need for early diagnosis and intervention in managing secondary PPH to prevent life-threatening complications.

Keywords: Placental polyp, Secondary postpartum hemorrhage, Home delivery, Emergency hysterectomy, Retained placental tissue.

Introduction:

Placental polyp is a rare but significant clinical condition that arises from the retention of placental tissue following childbirth, miscarriage, or abortion. This retained tissue forms a polypoidal mass within the uterus and is predominantly composed of necrotic and hyalinized chorionic villi, also known as "ghost villi," along with decidua and fibrin deposits.¹ While the

incidence of placental polyp is low, reported in less than 0.25% of pregnancies.² It can lead to severe complications such as irregular vaginal bleeding, secondary postpartum hemorrhage (PPH) and in some cases life-threatening hemorrhage. The condition may present acutely or remain asymptomatic for an extended period before manifesting with abnormal uterine

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bleeding.² Placental polyps are often diagnosed through imaging modalities like ultrasonography or histopathological examination. Management strategies

depend on the severity of symptoms, the patient's hemodynamic stability, and their reproductive desires. Surgical interventions such as total abdominal hysterectomy (TAH) are considered in cases of severe bleeding, while conservative approaches like uterine artery embolization or methotrexate therapy may be considered in less critical scenarios.² This case report highlights a unique presentation of placental polyp in a 30 year old woman who experienced persistent irregular vaginal bleeding following a term vaginal delivery at home followed by uterine evacuation for secondary PPH. The case emphasizes the importance of timely diagnosis and appropriate management to prevent potentially fatal outcomes.

Case Report:

Mrs. Sultana, a 30 year old housewife residing in Sadar, Faridpur, presented to the hospital on August 19, 2024, with complaints of persistent irregular per vaginal bleeding. She had a history of vaginal delivery 36 days prior, followed by uterine evacuation 26 days prior due to secondary PPH. Her obstetric history revealed that she has been married for seven years, with her first delivery in 2019. She had no significant past medical or surgical history.

On July 13, 2024, Mrs. Sultana had a full-term vaginal delivery at home conducted by a local dai, delivering a healthy female baby. Initially, postpartum bleeding was average but became excessive from the second day, requiring frequent pad changes. By the ninth day after delivery, her condition had worsened significantly. Mrs. Sultana started feeling extremely weak and dizzy due to the heavy bleeding. Alarmed by her deteriorating health, her husband admitted her to the hospital on July 22, 2024. Upon arrival, doctors discovered that she was severely anemic, with her hemoglobin measured at only 5.9 g/dL. Ultrasonography (USG) revealed moderate retained products of conception. On July 24, 2024, uterine evacuation was performed by the attending doctor following multiple (total 8 units) blood transfusions. She was discharged on July 28, 2024, with minimal bleeding.

Over the next 22 days, Mrs. Sultana continued to experience irregular vaginal bleeding, sometimes light, other times heavy which made her everyday tasks difficult. On August 19, 2024, she returned to the hospital for further management.

On August 19, 2024, on general examination, patient was mildly anemic, anxious but cooperative, normotensive (BP 110/80 mmHg), pulse 111 bpm. On per abdominal examination, abdomen was lax, no tenderness, uterus was not palpable. Per vaginal examination showed, minimal bleeding with globular dark reddish necrotic mass protruding through cervical OS. Bimanual examination revealed, bulky uterus (~12 weeks size), soft to firm 5×4 cm mass protruding through cervical OS, bleeds on touch.

Complete Blood Count (CBC) report showed on 20-07-2024, Hb 5.9 g/dl, ESR 120, WBC 23,000/cumm and on 26-08-2024, Hb 10 g/dl. USG on 24-07-2024 showed, bulky postpartum uterus, moderate placental tissue in endometrial cavity and on 19-08-2024 showed, mixed echogenic structure (6.5×3.1 cm) in the uterine cavity. Then on 20-08-2024 TVS report revealed, incomplete abortion with large retained placental fragments. Her beta-hCG during follow-up was 0.5.

On 19-08-2024 during admission, the patient was clinically stable, but profuse bleeding started during P/V examination. An emergency laparotomy was performed and upon entering the peritoneal cavity, the uterus was found to be of 12 weeks size. An anterior uterine wall incision was made and a mass was found which was densely adherent to the uterine wall with a broad base and profuse bleeding. Due to the patient's deteriorating condition, a total hysterectomy was performed by the physicians.

Postoperatively, she received five units of fresh human blood and showed gradual improvement. The dissected uterus with mass was sent for histopathological examination, which confirmed the diagnosis of a placental polyp.





Discussion:

This case highlights several important challenges in managing postpartum complications. First, the clinical presentation of a placental polyp can mimic other causes of postpartum hemorrhage, leading to delays in definitive diagnosis. Mrs. Sultana's case presented with persistent bleeding despite of initial uterine evacuation for secondary PPH. The initial USG focused on retained products of conception, and the subsequent diagnosis of placental polyp was confirmed through histopathological examination following hysterectomy, underscoring the difficulties in pre-operative diagnosis. The management of placental polyps varies based on the patient's clinical status and desire for future fertility. In Mrs. Sultana's case, the polyp was hypervascularized, as evidenced by the torrential bleeding encountered during examination. The decision to perform a total abdominal hysterectomy (TAH) was life-saving in this situation. It serves as a reminder that, in cases of uncontrolled bleeding where conservative measures fail, radical surgical intervention may be the only option to preserve the patient's life, even if it means sacrificing future fertility. This radical intervention contrasts with other reported management strategies, which include hysteroscopic transcervical resection (TCR) for non-hypervascular polyps, uterine artery embolization (UAE) to control active bleeding, and methotrexate therapy for cases without active bleeding.1

The diagnostic challenge lies in differentiating placental polyps from other causes of postpartum bleeding, such as retained products of conception or uterine subinvolution. Ultrasound imaging, while helpful, may be non-specific. Histopathological examination remains the gold standard for definitive diagnosis. Furthermore, this case brings attention to the risks associated with home deliveries, particularly without routine antenatal care and immediate postpartum follow-up.

Conclusion:

Mrs. Sultana's journey from a home delivery to an emergency hysterectomy is a stark reminder of the unpredictable nature of postpartum complications. Although placental polyps are rare, this case underscores the importance of considering this rare entity in the differential diagnosis of postpartum or post-abortal bleeding. Prompt recognition and appropriate intervention are essential to prevent potentially life-threatening complications, especially in resource-limited settings where home births are

common. This rare complication can lead to life-threatening hemorrhage, necessitating emergency surgical intervention, as highlighted in this case where a total abdominal hysterectomy was required to stabilize the patient. Clinicians should consider this condition in differential diagnoses for postpartum or post-abortal bleeding to ensure appropriate intervention. Ultimately, ensuring access to timely and comprehensive postpartum care can make the difference between recovery and life-threatening complications.

Conflict of interest: There is no conflict of interest.

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