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Intrapartum hemorrhage secondary to circumferential ectopic cervical deciduosis: A case report

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ABSTRACT

Introduction: Intrapartum hemorrhage constitutes a life-threatening obstetric complication and can have multiple etiologies. Some rare causes of intrapartum bleeding warrant consideration when assessing these patients. This case study represents one such instance where cervical deciduosis presented with bleeding relatively early in labor and explores the management that followed.

Case: A review was requested for a woman undergoing induction of labor due to intrapartum hemorrhage. On vaginal examination, a mass was palpated attached to the cervix which extended from 3 o'clock to 9 o'clock. During emergency caesarean section, a circumferential, sessile, polypoidal mass was attached to the superior margin of the internal cervical os. Histopathology revealed cervical deciduosis.

Conclusion: With regard to this patient, it is unknown if this episode of cervical deciduosis (and the associated intrapartum hemorrhage) was the sole cause of fetal distress or if it was an incidental finding. It is worth remembering that although placental causes of intrapartum hemorrhage are foremost in our minds, there can be other structures and causes that lead to intrapartum bleeding. This shows the complexity that may be associated with intrapartum care.

1. Introduction

Intrapartum hemorrhage constitutes a life-threatening obstetric complication and can have multiple etiologies. In light of this, health care workers have been primed for early recognition and escalation of hemorrhage with a focus on placental abruption and placenta previa. There are, however, some less common causes of intrapartum bleeding which warrant consideration when assessing these patients. One potential differential is cervical deciduosis, which on rare occasions can lead to significant intrapartum hemorrhage. This case study represents a clinical scenario in which cervical deciduosis presented with bleeding relatively early in labor and explores the management that followed.

2. Case Presentation

A 22-year-old woman, gravida 1, para 0, at 41 weeks and 4 days of gestation, was undergoing induction for post-date pregnancy. Two hours after artificial rupture of membranes and initiation of the oxytocin infusion, a review was requested secondary to new-onset intrapartum bleeding (~50 mL), meconium-stained liquor and abnormal cardiotocography (CTG). She had experienced a relatively low-risk pregnancy, with morphology scan demonstrating a placenta well clear of the cervix.

On examination she appeared well, contracting 3–4:10, with a soft abdomen in between contractions. On vaginal examination she was 4 cm dilated, fully effaced, and vertex at −1 station. The fetal head, however, was poorly applied, secondary to a large mass extending from 3 o'clock to 9 o'clock around the cervix. The mass was soft to palpation and seen in close association with posterior cervical lip and it was queried if she may have undiagnosed placenta previa. There was fresh blood on the doctor's glove following the examination. The patient's ultrasound scans were reviewed, and it was confirmed that the placenta was anterior and well clear of the cervical os. Due to the low likelihood that it was an undiagnosed placenta previa, the decision was made to collect a fetal scalp lactate sample. During the procedure a golfball-sized blood clot was removed from the vaginal vault. The lactate level was 4.4, which, in conjunction with the abnormal CTG trace, meconium-stained liquor, and an ongoing intrapartum hemorrhage of unclear origin, led to the decision for an urgent caesarean section.

During the caesarean section, and after delivery of the baby and placenta, the large mass was again identified on the cervix. As seen in Fig. 1, it was a circumferential, sessile, polypoidal mass attached to the superior margin of the internal cervical os. A small biopsy was taken from the mass and histopathology later demonstrated cervical deciduosis. The baby was an 8.6-pound female, with Apgar scores of 9 and 9 at one and five minutes of life, respectively.

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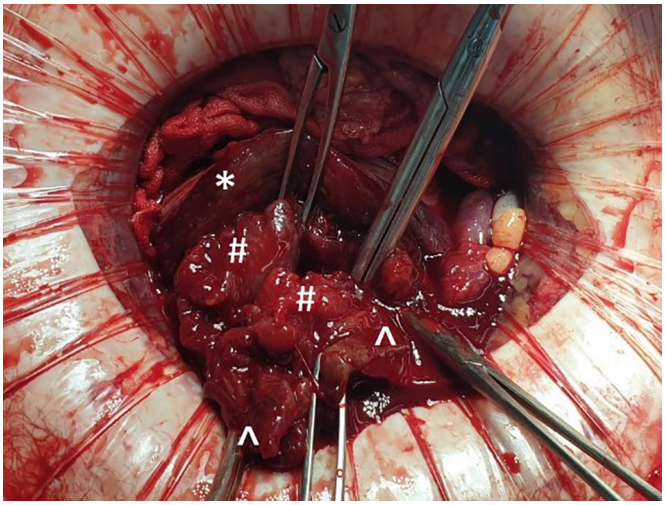

Fig. 1. Circumferential sessile polyps at superior margin of cervix at time of lower uterine segment caesarean section. * upper uterine segment. ^ lower uterine segment. # superior margin of cervix.

The patient experienced a routine recovery and was discharged 3 days after the caesarean section. Her neonate encountered no postnatal complications. At follow-up via telephone to discuss the diagnosis once the histopathology results had been returned it was noted that she was progressing well and was happy with the outcome. She was coincidently seen in the emergency department 6 months later for an episode of vaginal bleeding, when she was diagnosed with heavy menstrual bleeding. A speculum exam at the time revealed resolution of the cervical deciduosis.

3. Discussion

Decidualization of the endometrium is a normal physiological change during pregnancy [1]. When this process occurs in locations other than the endometrium - commonly at the cervix - it is known as deciduosis [2]. Cervical deciduosis is a benign pregnancy-specific finding, which usually self-resolves and rarely causes any concern during the antenatal period. The majority of cases are asymptomatic and are discovered incidentally on inspection as nodules with occasional inflammation [3]. Unfortunately, the appearance can mimic that of malignancy, and histological confirmation is necessary to rule out more sinister causes, such as metastatic carcinoma, mesothelioma or peritoneal tuberculosis [4].

To date, there has been minimal research on cervical deciduosis and labor. In previous cases where the diagnosis was made before labor delivery has been spontaneous [3], and it is plausible to assume that asymptomatic women have delivered without complication. The situation becomes more difficult when an intrapartum hemorrhage occurs. When bleeding in labor occurs, a physician must decide whether to continue labor or to expedite delivery via caesarean section. As always, using the whole clinical picture and a discussion with the patient and her family are essential in planning the mode of delivery. Cervical deciduosis alone is not an indication for caesarean section.

4. Conclusion

With regard to this patient, it is unknown if this episode of cervical deciduosis (and the associated intrapartum hemorrhage) was the sole cause of fetal distress or if it was just an incidental finding. It is worth remembering that although placental causes of intrapartum hemorrhage are most prevalent in our minds, there can be other structures that lead to intrapartum bleeding. We hope through this article we have been able to highlight this unusual cause of intrapartum hemorrhage and the intraoperative photograph helps guide care.

Contributors

Jonathan Buttery, the primary author, was a physician involved in patient care, drafted the initial manuscript, and revised and approved the final submission.

Amanda Harry was a physician involved in patient care, and the primary surgeon, revised the manuscript and approved the final submission.

Shveta Kapoor was senior medical officer involved in patient care, revised the manuscript and approved the final submission.

Conflict of Interest

The authors declare that they have no conflict of interest regarding the publication of this case report.

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Patient Consent

The patient described in this case study provided written informed consent.

Provenance and Peer Review

This case report was peer reviewed.

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