Cervical endometriosis in pregnancy: A rare cause of bleeding in pregnancy

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ABSTRACT

Introduction: Cervical endometriosis is a very rare site for endometriosis, with a reported incidence of 0.11–2.4%.

Case Report: We present a histologically proven case of cervical endometriosis in a 33-year-old pregnant woman who presented with post-coital bleeding during the first trimester of her pregnancy, with subsequent spontaneous regression, and successful vaginal delivery.

Conclusion: This case emphasizes the importance of a thorough pelvic examination in patients presenting with bleeding in early pregnancy and biopsy of any lesions as long as it is safe. Cervical endometriosis should be added to the list of differential diagnoses of bleeding in pregnancy after the more common causes have been excluded.

Keywords: Cervical endometriosis, Cervical mass, Pregnancy, Vaginal bleeding

INTRODUCTION

Endometriosis is one of the most common benign gynecological conditions and occurs in approximately 15% of women of reproductive age [1]. Cervical endometriosis is a very rare site for endometriosis, with a reported incidence of 0.11–2.4% [1, 2]. Its rarity may be due to the limited awareness of the clinical appearance of the disease [2]. Cervical endometriosis has been reported to be related to previous cervical injuries, for example, conization and pregnancy. Some cases, however, do not have any identifiable cause [1]. Although it is usually asymptomatic and diagnosed retrospectively in histopathologic reports, it can rarely present with gynecological symptoms such as hemorrhage, post-coital bleeding, irregular intermenstrual bleeding, and even life-threatening hemorrhage [1, 3–5]. Cervical endometriosis has been defined in two histopathological forms, superficial and deep [1]. Superficial cervical endometriosis involves the cervical stroma adjacent to the epithelium [1]. Deep cervical endometriosis involves the outer third of the cervical wall, the recto-vaginal septum or serosal surface of the supra-vaginal portion of the cervix [1]. Massive hemorrhage has been reported in rare cases and malignancy of deep infiltrating endometriosis has also been remissive [1, 6].

CASE REPORT

We report a case of a 33-year-old para 1021 who presented for her initial prenatal visit at a gestational age of 12 weeks and six days. She was initially evaluated by a midwife, who then called the obstetrician due to the finding of significant bleeding from a mass in the vagina during the speculum exam. The patient admitted a history
of frequent post-coital bleeding since the beginning of the pregnancy. However, she denied any post-coital bleeding prior to pregnancy, dysmenorrhea, or dyspareunia. On evaluation, there was 6 cm × 5 cm soft, friable mass protruding from the cervical os, which completely occluded it (Figure 1). The majority of the cervix was not visible. No other lesions were seen. Due to significant bleeding from the mass, vaginal packing was done and the gynecologic oncologist was consulted who arrived within minutes. The packing was removed, and the bleeding subsided slightly. After obtaining consent from the patient, biopsies were performed, after which Monsel solution (Ferric subsulfate solution, a hemostatic agent) was applied for hemostasis. The patient was observed for an hour and was discharged when the bleeding subsided. The patient was advised against sexual intercourse. Pathological examination of the biopsy revealed endometriosis. She was informed of the diagnosis and was advised that further management, including possible surgical excision, might be necessary if significant bleeding recurred.

The patient continued to report recurrent vaginal spotting until about 20 weeks gestation. After 20 weeks gestation, the patient reported no further episodes of vaginal bleeding. Subsequent speculum examination revealed a significant regression of the mass, more of the cervix was visible, and the mass became restricted to the right side of the cervix. There was no bleeding with the speculum exams.

The patient presented twice to the labor and delivery triage at 33- and 36-weeks' gestation with complaints of uterine contractions. Gentle vaginal exams were done to determine cervical dilatation and there was no bleeding associated with the pelvic exam. The patient was discharged on both occasions with recommendations to abstain from having sexual intercourse, avoid putting anything deep in the vagina, and restricting any heavy exercises that may strain the pelvic floor. The Maternal-Fetal Medicine specialist was consulted and advised that the patient could attempt a vaginal delivery. The patient presented in spontaneous labor at 39 weeks’ gestation and had a successful vaginal delivery with no bleeding from the mass.

During a 6-week postpartum visit, the patient reported feeling well and had returned to her daily activities. The pelvic examination revealed complete resolution of the endometriosis.

DISCUSSION

Cervical endometriosis causing bleeding is very rarely documented in pregnancy. An extensive literature search yielded no case reports. The majority of cervical endometriosis are bluish, bluish-black, or red nodules that are 0.2–1.5 cm lesions [1]. Other findings include polyploid lesions, e.g., cystic red masses of 3–6 cm in size, which was the presentation in our case, myoma-like masses of about 4 cm, or retrocervical masses [6, 7]. In 2020, Ayala et al. reported a case of a pregnant patient at 13 weeks' gestation who presented with disabling pain at 13 weeks gestation [8]. She was diagnosed with a large, rapidly growing retrocervical endometriosis nodule encompassing a uterine artery pseudo-aneurysm [8]. Frederic Richard et al. also reported a case of a 32-year-old woman with suspected malignant deep infiltrating endometriosis fistulized to the cervix, who became pregnant while being worked up for radical hysterectomy [9]. However, she did not present with any bleeding. That patient had a cesarean delivery at 34 weeks followed by full examination and biopsies which revealed endometriosis without malignancy [9]. Although our patient did well with conservative management and spontaneous shrinkage of the cervical mass, allowing for a vaginal delivery, massive hemorrhage could potentially require termination of the pregnancy and even hysterectomy.

CONCLUSION

Cervical endometriosis as a cause of bleeding in pregnancy is extremely rare. This case underscores the importance of a thorough pelvic examination in patients presenting with bleeding in early pregnancy and biopsy of any lesions as long as it is safe. Persistent symptomatic cervical endometriosis could potentially preclude vaginal delivery. Clinicians should add cervical endometriosis to their differential diagnoses of bleeding in pregnancy once the more common causes have been ruled out.

Figure 1: Speculum pelvic examination showing a large cervical mass in a pregnant patient with cervical endometriosis.
REFERENCES


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Author Contributions

Nawras Zayat – Conception of the work, Design of the work, Acquisition of data, Analysis of data, Interpretation of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Ariane M Chabanne – Conception of the work, Design of the work, Drafting the work, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

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Authors declare no conflict of interest.

Data Availability

All relevant data are within the paper and its Supporting Information files.

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