

# Successful Management of Cervical Ectopic Pregnancy in a Primigravida with Dilation and Evacuation: A Case Report

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## ABSTRACT

Cervical ectopic pregnancy (CEP) is a rare and potentially life-threatening condition, particularly in primigravid patients. This case presents a 20-year-old primigravida with painless vaginal bleeding at 8 weeks of amenorrhea, diagnosed with CEP via early pregnancy ultrasound. The patient underwent a successful emergency dilation and evacuation (D&E) procedure, preserving fertility and preventing excessive hemorrhage. Postoperative recovery was uneventful, and follow-up ultrasound confirmed complete evacuation. This case highlights the importance of early diagnosis and careful management of CEP, particularly in terms of preserving future fertility and minimizing complications like hemorrhage and cervical insufficiency.

## INTRODUCTION

Cervical ectopic pregnancy (CEP) is a rare and potentially life-threatening condition, especially in primigravid patients. It occurs when a fertilized egg implants in the cervix rather than the uterus or fallopian tubes, resulting in complications such as significant hemorrhage, cervical laceration, and potential fertility issues. CEP represents less than 1% of all ectopic pregnancies, making its diagnosis and management a rare challenge for clinicians. [1]

## Case Report

A 20-year-old primigravida patient presented to the emergency with complaints of profuse painless vaginal bleeding following 8 weeks of amenorrhea. Her menstrual cycles were regular and there was no history of contraceptive usage. On examination, patient was hemodynamically stable with hemoglobin of 10.2 g/dl. Abdomen was soft and non-tender on palpation.

Per speculum and vaginal examination revealed a closed external os with ballooning of cervix (Figure 2), normal sized uterus, no adnexal mass or tenderness. Early pregnancy scan showed a gestational sac without cardiac activity in the lower cervical region corresponding to 6 weeks and 3 days, suggestive of cervical ectopic pregnancy (Figure 1). In an attempt to preserve fertility, a dilatation and evacuation was planned after

explaining the dangers and complications associated with this procedure to the patient and her family. Patient was posted for emergency dilatation and evacuation. Initially bilateral descending cervical arteries were ligated at 3 and 9 o'clock positions, followed by sequential dilatation by Hegar dilators. Once adequate dilation was achieved, suction curettage was performed to evacuate the products of conception. A Karman curette and suction aspirator were used to carefully remove the gestational sac and any remaining tissue from the cervical canal.

The integrity of the cervix was preserved, and no residual tissue was detected on inspection. The uterus was checked to ensure that no additional products of conception was retained. Following the evacuation, the cervix was inspected and minimal bleeding was noted (Figure 3), and uterine tone was assessed. Oxytocin was administered intravenously to promote uterine contraction and reduce the risk of further bleeding. The use of hemostatic agents was not required, as bleeding was controlled effectively. The patient's postoperative course was uneventful. She was closely monitored for signs of infection, bleeding, or any other complications. Follow-up ultrasound was performed 48 hours later to confirm the complete evacuation of the cervical pregnancy and to rule out retained products of conception. The patient was discharged on

postoperative day 2 with instructions to follow up in the outpatient clinic.

## DISCUSSION

Primigravid women with CEP often present with symptoms such as vaginal bleeding and pelvic pain, as seen in this case. Early diagnosis is critical, as untreated cervical ectopic pregnancies can lead to substantial maternal morbidity due to uncontrolled hemorrhage. [2]

Transvaginal ultrasound remains the gold standard for diagnosing CEP, typically revealing a gestational sac located within the cervical canal without an intrauterine gestational sac [3] as seen in this case. Management of CEP requires careful consideration of the patient's clinical stability, gestational age, and desire for future fertility. Treatment options include medical management with methotrexate, local injection of potassium chloride or hyperosmolar glucose, and surgical approaches, such as dilation and evacuation (D&E), which was the method used in this case. D&E is often preferred in cases where there is a risk of massive hemorrhage, or where medical management is not feasible or has failed. It allows for the evacuation of the products of conception and, when performed correctly, can minimize the risks of cervical injury and excessive bleeding. [4] The primary concern when performing D&E in a cervical ectopic pregnancy is hemorrhage, given the rich vascular supply to the cervix.

The use of uterotonics such as oxytocin can help control uterine bleeding, but cervical bleeding can still be substantial due to the friability of the tissue. Cervical suturing may be necessary to control bleeding or prevent future cervical insufficiency. [5] In our patient, bleeding was well controlled during the procedure, and no cervical sutures were required, indicating that with careful surgical technique, hemorrhage can be effectively managed.

Studies have shown that cervical pregnancies are associated with an increased risk of future pregnancy complications, including cervical insufficiency and preterm labor, particularly if there is significant trauma to the cervix. [6] However, in this case, the patient did not experience any significant cervical injury or bleeding, which bodes well for her future reproductive potential. Close follow-up and

monitoring during subsequent pregnancies will be essential to ensure her reproductive health.

## CONCLUSION

Cervical ectopic pregnancy, though rare, requires prompt recognition and management to prevent severe complications, including hemorrhage and reproductive impairment. In primigravida patients, such as the one described in this case, dilation and evacuation remains a valuable and effective treatment option, especially when the condition is diagnosed early and the patient is hemodynamically stable. This case also underscores the importance of early intervention and multidisciplinary care in managing rare obstetric emergencies like cervical ectopic pregnancy. While this patient had a favourable outcome, continued surveillance is important for her long-term reproductive health.

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**Figures with Figure Legends**



Figure 1: Ultrasound showing cervical ectopic pregnancy



Figure 2: Per speculum examination showing ballooning of cervix



Figure 3: Post dilatation and evacuation procedure with ligated descending cervical arteries

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#### **Competing Interests**

None declared.

#### **Patient Consent**

Informed consent obtained from the patient and/or her guardian(s).