



A Rare Case Report of Cervical Ectopic Pregnancy

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Abstract

Introduction: Cervical ectopic pregnancy is extremely rare, accounting for less than 1% of all ectopic pregnancies. Its etiology is still unclear. However, there are reports of association with chromosomal abnormalities as well as a prior history of procedures that damage the endometrial lining such as cesarean section, intrauterine device, and in vitro fertilization.

Objective: To find out, to keep records & to follow-up of any rare disease and evaluate the cause of cervical haematoma

Case: A 35-year-old G3P2L2 with previous two lower segment caesarean sections, a referred case presented with complaint of painless excessive bleeding per vaginum for 7 days following menstrual regulation (MR). General examination revealed mild pallor with tachycardia and blood pressure of 100/60 mmHg. On gentle per vaginum examination revealed edematous, patulous cervix & closed external os with active bleeding. The case is reported here for its relative rarity.

Conclusion: Although considered rare, cervical ectopic pregnancy represents major threat due to its risk of major life threatening haemorrhages. Therefore, different methods of treatment were used ranging from hysterectomy up to conservative ones. Hysteroscopic resection has enabled us to remove the product of conception from cervix making the minimal damage to the local tissue, thus preserving fertility. Persisting pervaginal bleeding after menstrual regulation (MR) could be a rare cause of cervical ectopic pregnancy.

Keywords: Cervical pregnancy, hysteroscopy, menstrual regulation.

Introduction

A cervical pregnancy is an ectopic pregnancy that has implanted in the uterine endocervix. Such a pregnancy typically aborts within the first trimester, however, if it is implanted closer to the uterus which cervico-isthmic pregnancy—it may continue longer. Ectopic pregnancy develops outside the uterus, usually in one of the fallopian tubes. In almost all cases, the embryo dies. The

developing placenta cannot access a rich blood supply and the fallopian tube is not large enough to support the growing embryo. In around 15 per cent of cases, the tube ruptures, causing pain, internal bleeding and shock. Placental removal in a cervical pregnancy may result in major hemorrhage. Cervical pregnancy carries a high risk of life-threatening bleeding if it is not treated correctly. Risk factors include previous

endometrial curettage, previous cesarean section, use of intrauterine devices, and assisted reproductive technologies. Ectopic pregnancy may occur any time from menarche to menopause.

The incidence of ectopic pregnancy is three times higher in women aged 35-44 years in comparison to those in the age group 15-24 years. In cervical ectopic pregnancy, the implantation happens in endocervical canal which is a rare condition, accounting for less than 1% of ectopic pregnancies. Incidence varies from 1:8600 to 1:12,400 of total pregnancies. If the diagnosis is delayed, massive bleeding or even hypovolemic shock may occur. Nowadays due to improved ultrasound resolution (including transvaginal ultrasound) has made it possible for early detection of these pregnancies and lead to more conservative treatment with an attempt to limit morbidity and preserve fertility.^{[1][2]}

Case Report

A 35-year-old G3P2L2 with previous two lower segment caesarean sections, a referred case presented with complaint of painless excessive bleeding per vaginum for 7 days following menstrual regulation (MR). General examination revealed mild pallor with tachycardia and blood pressure of 100/60 mmHg. On gentle per vaginum examination revealed edematous, patulous cervix & closed external os with active bleeding. Transvaginal ultrasound (TVS) scan revealed empty uterine cavity with endometrial thickness 7.6 mm, closed internal os and an ill-defined inhomogeneous space occupying lesion of size 4.6 cm × 7.2 cm. Both the ovaries and tubes were normal and there was no free fluid in pouch of Douglas. Serum beta human chorionic gonadotropin (hCG) level was 94.97mIU/ml with normal blood coagulation profile. She was treated conservatively with follow up TVS. Repeated follow up TVS revealed that there was increasing the size of inhomogeneous area with numerous vascularity in it (arterio-venous malformation).



Figure-1a and 1b: Using Transvaginal ultrasound (TVS) detection of cervical ectopic pregnancy

Provisional diagnosis was cervical hematoma as a complication of MR. The patient was worried as she was treated conservatively without any improvement. She was managed by hysteroscopic biopsy intake from the hematoma followed by diathermy coagulation. Postoperative period was uneventful. Histopathology report showed the presence of chorionic tissues which confirmed the diagnosis of cervical ectopic pregnancy.

Discussion

Diagnosis of cervical pregnancy requires visualization of an intracervical ectopic gestational sac or trophoblastic mass. Transvaginal ultrasound improves visualization in cases of early cervical pregnancy. It allows assessment of the gestational sac and, additionally, the endometrium and adnexa.

But its etiology is still indistinct and unclear. However, there are reports of association with

chromosomal abnormalities as well as a prior history of procedures that damage the endometrial lining such as cesarean section, intrauterine device, previous dilatation, curettage, Asherman's Syndrome, previous Cesarean section, previous cervical or uterine surgery and in vitro fertilization^[3]

Recently in one study 50 consecutive patient were evaluated for finding the risk factors of ectopic pregnancy where reported that 42% cases had previous history of menstrual regulation (MR) which increase the risk of ectopic pregnancy 14-fold.^[4] Also, another study observed 48% patients had previous history of MR.^[5]

Another case reported that after screening of TVS 32-year-old woman, who diagnosed EP had persistent vaginal bleeding for 12 days and revealed that she had a ballooned-out cervical canal with a gestational sac of 4.7 cm × 4.1 cm and an empty uterus with thickened endometrium which is quite similar to this study.^[6]

Recently another case was reported where study was done on 41-year-old female with past history of two previous lower segment cesarean sections (LSCSs) was diagnosed with scar ectopic pregnancy at a private hospital for which she underwent uterine dilation and curettage at 6 weeks gestation and had persistent heavy vaginal bleeding.^[7]

Treatment options for Cervical Ectopic Pregnancy can be divided into following categories:^[8]

✓ Surgical excision of trophoblast: Curettage and hysterectomy are the classic methods for surgical excision of trophoblast tissue. Curettage is the age-old fertility preserving method, but risks hemorrhage. Therefore, it has been used in conjunction with mechanical methods like cervical artery ligation and tamponade. Primary hysterectomy may still be the preferred modality of treatment in intractable hemorrhage, second trimester or third trimester diagnosis of CP and possibly to avoid emergency surgery and blood transfusion in a woman not desirous of fertility. In a review, 100% of CP beyond 12

weeks' gestation ultimately required hysterectomy.

- ✓ Tamponade with Foley catheter: Use of a Foley catheter, placed gently past the external os, followed by inflation of the bulb with 30 mL saline has been used mostly after other techniques (e.g., curettage), result in hemorrhage. Tamponade with packing is not very useful.
- ✓ Reduction of blood supply: This may be undertaken by cervical cerclage, vaginal ligation of cervical arteries, uterine artery ligation, internal iliac artery ligation and angiographic embolization of the cervical, uterine or internal iliac arteries. This is usually done in preparation for surgical therapy like curettage, or along with chemotherapy, as a conservative treatment modality aimed at preserving future fertility. Embolization is primarily used as a "rescue" therapy when profuse bleeding follows other conservative methods like chemotherapy.
- ✓ Intra-amniotic feticide: Ultrasound-guided intra-amniotic instillation of potassium chloride and/or methotrexate has been used as a conservative approach for the management of CP. Both these procedures require skill and expertise.
- ✓ Systemic chemotherapy: The most commonly used agent is methotrexate, used in a single dose or multiple doses, with or without folinic acid. However, methotrexate may be associated with bone marrow suppression, gastrointestinal disturbances and elevation of hepatic transaminases. Recently, a combination of laparoscopy-assisted uterine artery ligation followed by hysteroscopy local endocervical resection to remove Cervical Ectopic Pregnancy has been described as a fertility-preserving alternative therapy.^[9]

Conclusion

Cervical ectopic pregnancy represents main threat due to its risk of major life-threatening haemorrhages. Hence, different methods of

treatment were used ranging from hysterectomy up to conservative ones. Hysteroscopic resection has enabled us to remove the product of conception from cervix making the minimal damage to the local tissue, thus preserving fertility. Here is the rare case, to create awareness regarding persistent cervical ectopic pregnancy. Persisting pervaginal bleeding after MR could be a rare cause of cervical ectopic pregnancy.

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