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CERVICAL ECTOPIC PREGNANCY : SECOND TRIMESTER NEAR MISS!

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ABSTRACT Cervical pregnancy (CP) is a rare form of ectopic pregnancy (EP) comprising less than 1% of ectopic pregnancies. In this type of pregnancy, the embryo implants and grows inside the endocervical canal. Early diagnosis is essential in order to allow conservative medical and surgical treatments. Due to the rich cervical vascularity and the incompatibility of the cervix to hold an advancing pregnancy, there is a marked increase in the potential of hemorrhage leading to mortality & morbidity. Here we discuss a case of a second trimester abortion stumbled upon us as an emergency case with unexplained torrential bleeding which led to her obstetric hysterectomy. It was retrospectively diagnosed to be a case of cervical pregnancy. This case helped us to understand the nuances and need to think laterally in unusual presentation of ectopic pregnancy, to have good outcome.

KEYWORDS : Cervical Pregnancy, Ectopic Pregnancy, Obstetric Hysterectomy

INTRODUCTION

Amongst all ectopic pregnancies, Cervical ectopic pregnancy accounts for less than 0.1%. It occurs due to implantation of a fertilized ovum in the endocervical canal below the level of internal OS. There is a marked increase in the potential of hemorrhage due to the rich cervical vascularity, the incompatibility of the cervix to hold an advancing pregnancy and to seal the cervico-placental vessels by contraction after the evacuation of the placenta, leading to mortality and morbidity.[1] Assisted reproductive technology (ART) and prior uterine curettage are some of the risk factors.[2] Advanced ultrasound techniques are leading to early diagnosis and better conservative management of cervical ectopic pregnancy.[3]

Case Study

A 26 years old female , primigravida with 16-17 weeks gestational age, unregistered , uninvestigated and unimmunized came with complaints of pain in abdomen and per vaginal bleeding. Patient did not know her date of last menstrual period. Her past menstrual history was suggestive of moderate painless flow of 5-6 days with regular interval of 28-30 days. She was primigravida , who conceived spontaneously. No significant medical or surgical history in the past. Bowel , bladder , sleep , appetite pattern were unaltered.

On admission, her general condition was moderate, afebrile on touch, pulse rate 112/min, blood pressure 96/54 mmHg and pallor was present. No abnormality detected on systemic examination.

Uterus was just palpable and per abdominal examination was essentially normal. Per speculum examination showed bleeding and bulging membranes On per vaginal examination, a bulging gestational sac was present.

Provisonal diagnosis of second trimester inevitable abortion was made.

Blood investigations were sent. Inj.Pitocin10 I.U. was started to expedite the process, fetus was expelled but placenta wasn't separated. On Per vaginal examination multiple boggy structures felt, from which cervix wasn't delineated separately.

Provisional diagnosis of Placenta Previa was made.
Patient was shifted to emergency OT in view of torrential bleeding for vaginal exploration, on examination products of conception were seen along with cotyledons of placenta. Curettage of products of conception attempted, products couldn't be separated completely, profuse bleed continued causing hemorrhagic shock. On examination: pulse rate 144/min (feeble) , blood pressure 72/44 mmHg, SpO2 90% at room air, respiratory rate 28/min.Immediate resuscitation was initiated by Intensivist, patient was put on inotropic and ventilatory support. Blood investigations were, Hb - 6.5g/dl, platelet count - 63,000/ul ,prothrombin time – 27sec, INR- 1.8, APTT - 39sec, Fibrinogen - 98mg/dl. Decision of emergency laparotomy was made in view of patient's hemodynamic instability (haemorrhagic shock).

Intra-operative finding was bulky uterus with a 8x10cm ballooned cervix s/o Cervical (ectopic) pregnancy. Bilateral internal iliac artery ligation was done. Blood components were transfused [3PCV, 4 FFP, 2 cryoprecipitate, 4RDP]. Simultaneously, Total obstetric hysterectomy was performed due to uncontrolled bleeding and drain was put in the pouch of douglas. Post operatively patient needed intensive unit for mechanical ventilatory and inotropic support for 3 days, blood components were transfused [2PCV, 2FFP, 2RDP]. On post op day 4, drain was removed and patient was shifted to wards. Supportive care along with IV fluids, suitable antibiotics, antacids, antiemetics were given. Patient was stable, with healthy vaginal vault and stitch line. Patient was given discharge on post op day 7.

Histopathology report traced and was suggestive of Cervical Pregnancy.

Image 1: Increased vascularity of cervix

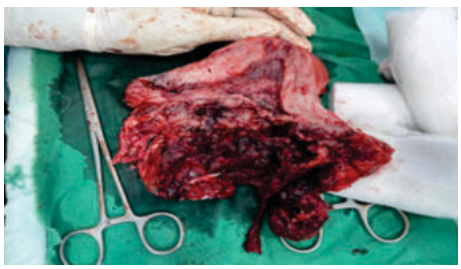

Image 2: Cut section showing placental adherence into the cervix

Image 3: Dilated cervix and external os

DISCUSSION

Cervical ectopic pregnancy is one of the rarest forms of non-tubal ectopic pregnancy, and it can be defined as implantation of the blastocyst in the endocervix below the internal ostium. It accounts for less than 1% of all ectopic pregnancies, and one in 1,000–95,000 pregnancies. The exact etiology of cervical pregnancy is unknown.[4] In 1911, Rubin proposed the pathological criteria for the diagnosis of cervical ectopic pregnancy: 1) cervical glands must be present opposite the placental attachment, 2) the attachment of the placenta to the cervix must be intimate, 3) the whole or a portion of the placenta must be situated below the entrance of the uterine vessels, or below the peritoneal reflection of the anterior and posterior surface of the uterus and 4) no fetal elements must be present in the corpus uteri.[5] Management of cervical ectopic pregnancy depends upon patient stability, gestational age, B HCG level and fetal cardiac activity. Systemic methotrexate single or multi-dose protocol i.e. 1.0 mg/kg body weight on days 1, 3, 5 and 7 interspaced by Inj. leucoverin 0.1 mg/kg body weight is the mainstay of therapy.[6] Other minimally invasive interventions included ultrasound-guided injection of potassium chloride into the pregnancy, vaginal ligation of cervical branches of the uterine arteries, and dilatation and curettage, with or without dilute vasopressin cervical infiltration and Foley catheter tamponade,[7] UAE followed by curettage, [8] placing cerclage suture at internal os to compress the feeding vessels.

Continuous bleeding and hemodynamically unstable patient may be treated with uterine artery embolization (UAE) and hysterectomy if all other measures fail. During hysterectomy, ureter injury is a concern due to close proximity of a ballooned cervix to the ureters.[9]

As per our case experience, though the incidence of cervical ectopic pregnancy is rare, one should have a very strong suspicion of its occurrence and its possibility should be considered. Early detection by the use of imaging techniques may be very beneficial for avoiding complications and the need of radical measures like hysterectomy.

CONCLUSIONS

Cervical ectopic pregnancy is the rarest type of ectopic pregnancy, however there has been an increased incidence due to the use of assisted reproductive techniques (ART).There is a high rate of incorrect diagnosis. The most common misdiagnosis is cervical miscarriage. Severe hemorrhage is the main risk of cervical ectopic pregnancy. Conservative treatments like local and systemic methotrexate, dilatation and curettage, uterine artery embolization are attempted with improved ultrasound resolution which were earlier treated with hysterectomy, to limit morbidity and preserve fertility in non severe first trimester cases.This case report illustrates a very rare pathology managed radically with hysterectomy. The initial delay in diagnosis might have influenced the patient's choice and limited the chances of success with conservative measures.

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