A Case of Mistaken Identity: Cervical Ectopic Pregnancy

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Background

Cervical ectopic pregnancy is a rare form of ectopic pregnancy, with an incidence of less than 0.1% of all ectopic pregnancies. It is a potentially life-threatening condition which is associated with high morbidity and mortality rates due to the risk of severe haemorrhage (1). Traditionally treatment was a hysterectomy in cases of later gestation or uncontrolled bleeding. Earlier successful diagnosis has allowed for other treatment options to be offered which include curettage and tamponade with foleys catheter, systemic chemotherapy with methotrexate or intra-sac instillation of KCL/methotrexate (1,2). Despite significant advances in ultrasound techniques, it remains difficult to differentiate a cervical ectopic pregnancy from a cervical abortion. These challenges are highlighted in this case of cervical ectopic pregnancy which was initially managed as a cervical abortion.

Case

A 36-year-old lady G3POM2 presented to the emergency department (ED) with a 1-week history of initially mild lower abdominal cramping and PV spotting which increased to heavy PV bleeding with clots and associated severe lower abdominal pain over the preceding 24 hours. A home pregnancy test performed the day prior was positive and she was referred to ED by her GP. Based on regular menstrual cycles she was 5+1 weeks gestation. She had been trying to conceive for 18 months with an obstetric history significant for an early first trimester miscarriage managed conservatively and a second miscarriage at 9 weeks gestation for which she underwent a D+C. On examination abdomen was soft and non-tender. Minimal bleeding per vaginum. Vitals remained stable. Initial bHCG in ED was 4,135mIU/mL.

Case Cont.

A transvaginal ultrasound revealed no intrauterine gestational sac, with heterogeneous material within the distended cervical canal measuring approximately 27mm (Figure 1). A provisional diagnosis of an incomplete miscarriage was favoured. Serial bHCG and follow up ultrasound was recommended, and she was discharged to GP follow up.

Repeat bHCG five days later was 11,745 mlU/mL. This prompted her GP to organise a repeat pelvic ultrasound which reported a cervical ectopic pregnancy, crown rump length 3.2mm, corresponding to 5+5 weeks gestation with cardiac activity present (figure 2). On arrival to ED she was experiencing severe lower abdominal cramping with a small amount of vaginal bleeding on speculum exam. She remained hemodynamically stable and was admitted for treatment of cervical ectopic pregnancy.

Following discussion of treatment options, IV methotrexate was administered with bHCG day 0 of treatment 6048 mIU/mL. The patient was discharged from hospital three days later. Follow up seven days later showed an appropriate fall in bHCG to 166mIU/mL. Serial bHCG's were performed until negative. The patient was counselled on avoidance of pregnancy post methotrexate for 3 months and early US scan with next pregnancy.

Discussion

Cervical ectopic pregnancy is a potentially life-threatening condition, and it is therefore important for clinicians to differentiate between cervical ectopic pregnancy and cervical abortion. Timely diagnosis and treatment are important to preserve fertility and reduce the risk of complications such as severe haemorrhage and need for hysterectomy.



Figure 1- ultrasound image showing heterogeneous material within the distended cervical canal



Figure 2- ultrasound image showing the cervical ectopic with crown rump length 3.2mm $\,$

References

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