A rare case of persistent ectopic pregnancy

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Introduction

Persistent ectopic pregnancy following tubal abortion laparoscopic management, and medical treatment can be diagnosed by serum βhCG levels.

Case report

Mrs. P, a 30 year old woman came to the outpatient clinic on 22nd July, 2002 with complaints of pain in the lower abdomen since one day and vaginal spotting since 10 days. Her LMP was on 4th July, 2002, but with decreased flow than usual. Previous to that she had her menstruation on 4th June, 2002. Her only previous pregnancy resulted in a live birth 4½ years ago. She was a known case of polycystic ovaries.

Her vital signs were within normal limits. Abdomen was soft. On speculum examination, cervix and vagina were normal, and there was bleeding from the cervical canal. On vaginal examination, the uterus was normal in size retroverted, retroflexed, and freely mobile. Tenderness was noted in the posterior fornix.

Serum βhCG already done on 17th July, 2002 gave a value of 130 mIU/mL. Ultrasound examination done on the same day revealed a normal sized empty uterus with endometrial thickness of 7.8 mm. Both ovaries were enlarged with evidence of stromal hyperplasia. Fluid was seen in the cul-de-sac. No adnexal mass could be identified.

She was admitted and managed conservatively. Due to persistent pain in the lower abdomen serum βhCG was repeated on 24th July, 2002; it was 120 mIU/mL. Repeat ultrasound examination showed the uterus to be empty with endometrial thickness of 6.5 mm (Figure 1). A well defined poorly outlined hypoechoic lesion measuring 26 x 19 mm was seen in the right adnexal region. There was minimal fluid in the cul-de-sac.

A diagnostic laparoscopy was done on 25th July, 2002. It showed that organized products of conception were lying anterior to the uterus and attached to the right fimbrial end. Ampulla of the right tube was dilated to 1 x 1 cm. No bleeding was seen from the fimbrial end of the right tube. Uterus and both ovaries were of normal size. No hemoperitoneum was seen. A diagnosis of right tubal abortion was made. Peritoneal lavage was done with suction evacuation of products from the peritoneal cavity and right tubal end. The patient was discharged on 25th July, 2002 and later followed up with serial βhCG.

Figure 1. Sonography picture showing an empty uterus.
However, her βhCG revealed a rising trend from 490 mIU/mL on 3rd August, 2002 to 1000 mIU/mL on 5th August, 2002. A repeat vaginal sonography with color flow studies, revealed a thickened right fallopian tube lateral to the right ovary; it contained a 3.3 mm anechoic area with echogenic margins. Color flow in the periphery of the area revealed a high impedance wave form. Free fluid was seen in the cul-de-sac. The uterus was normal sized and empty with endometrial thickness of 7.8 mm. Both ovaries were enlarged with multiple small follicles.

In view of the increasing βhCG and persistence of anechoic area on ultrasound, a diagnosis of persistent ectopic pregnancy was made. The patient was admitted again on 7th August, 2002 and after routine investigations, was administered injection methotrexate 50 mg intramuscularly.

As serial βhCG showed a falling trend she was discharged on 11th August, 2002. Her serum βhCG level was 900 mIU/mL on 9th August, 2002, 450 mIU/mL on 11th August, 2002, 240 mIU/mL on 13th August, 2002, 170 mIU/mL on 16th August, 2002 and nil on 23rd August, 2002 i.e., 16th day after methotrexate administration. Repeat ultrasound examination revealed findings consistent with the diagnosis of resolving ectopic gestation.

**Discussion**

Ectopic pregnancy is implantation of blastocyst outside the uterine cavity. Recently, with the development of immunoassays utilizing monoclonal antibodies to βhCG and of high resolution ultrasound scanners, an ectopic pregnancy can be diagnosed before significant hemorrhage occurs. This ability to make an early diagnosis has led to new ways of treatment like endosurgery 1 or methotrexate 2.

Persistent ectopic pregnancy is a complication that is seen in patients undergoing surgical evacuation 3. In this condition, the removal of the pregnancy is incomplete and residual trophoblast continues to survive. The diagnosis is made by a lack of fall or a rise in serum βhCG level postoperatively. Persistent ectopic pregnancy can be managed surgically by re-evacuation. Recently, this condition has also been successfully treated medically by intramuscular injection of methotrexate 4.

In our case, the rising levels of serum βhCG postoperatively, led to the diagnosis of persistent ectopic pregnancy. This case highlights the occurrence of persistent ectopic pregnancy even after surgical evacuation which was successfully managed with methotrexate. It also emphasizes the importance of proper follow-up after treatment of ectopic pregnancy.

**References**