

Interstitial ectopic pregnancy managed with local methotrexate

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DESCRIPTION

A 38-year-old woman, 7 weeks and 4 days pregnant as assessed by her last menstrual period, presented to our emergency department with non-painful vaginal bleeding for 2 days. She was a gravida 2, para 1 with a history of caesarean section 12 years before. Her serum β human chorionic gonadotropin level (β -HCG) was 2776 mIU/mL. Other laboratory results, including full blood count and liver function tests, were normal. Ultrasonography showed an empty uterine cavity and a gestational sac implanted adjacent to the right lateral aspect of the uterine cavity, surrounded by a thin myometrial layer (figure 1), containing a live embryo with bradycardia. These findings confirmed the presence of a right interstitial ectopic pregnancy. The patient was given a local injection of 25 mg of methotrexate plus 2 mEq of potassium chloride transabdominally, under ultrasound guidance (figure 2). Potassium chloride was used to arrest the embryonic heart action.¹ The patient tolerated the procedure well and no side effects were reported. Serum β -HCG peaked at 3363 mIU/mL on the third day and then started declining. On follow-up 2 months later, the patient was asymptomatic, her β -HCG level was negative and ultrasound resolution was achieved (figure 3).

Interstitial pregnancy is a rare occurrence and remains one of the most difficult ectopic pregnancies to identify. Ultrasound criteria for the diagnosis

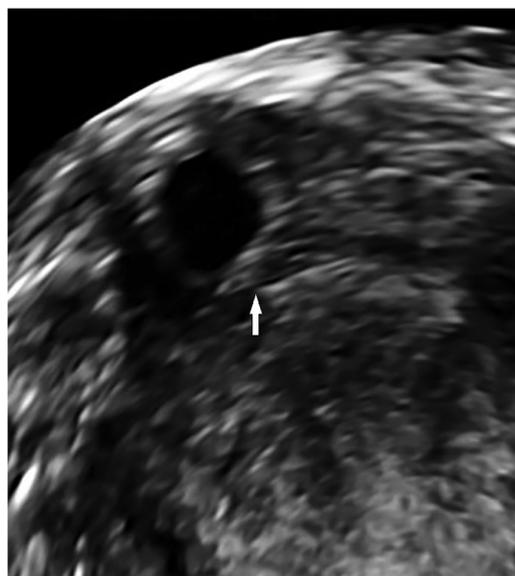


Figure 1 Three-dimensional ultrasound imaging demonstrating the proximal interstitial segment of the tube (arrow) joining the uterine cavity to the ectopic pregnancy, described as an 'interstitial line sign'.



Figure 2 Transabdominal imaging scan showing a needle (arrow head) inserted into the gestational sac for local administration of methotrexate plus potassium chloride.

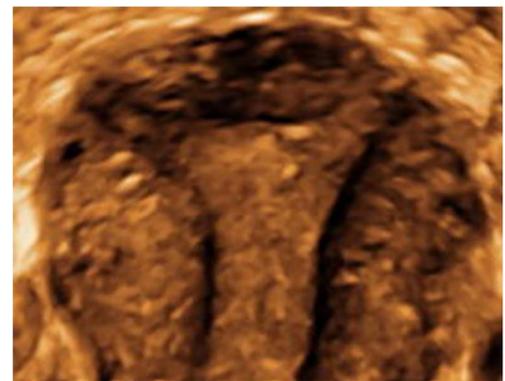


Figure 3 Three-dimensional ultrasound imaging showing normal appearance of the uterus on follow-up.

are an empty uterine cavity, a gestational sac located eccentrically and distant from the lateral wall of the uterine cavity, a thin myometrial layer surrounding the gestational sac and the presence of an 'interstitial line sign'.^{1 2} Current treatment options include minimally invasive surgery and non-surgical approaches such as expectant management, systemic methotrexate or local injection.^{1 3}

Learning points

- ▶ Ultrasound imaging enables early diagnosis of interstitial ectopic pregnancy but strict diagnostic criteria must be used.
- ▶ Local injection of methotrexate is a safe and effective treatment for interstitial ectopic pregnancy.



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