

## A case of intramuscular methotrexate and intracardiac KCl injection for cervical ectopic pregnancy

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### Objective

Cervical pregnancy is a rare form of ectopic pregnancy and its incidence is less than 0, 1% of all ectopic pregnancy. It is a potentially life-threatening condition due to the unexpected and uncontrollable bleeding from the cervix. We report a case of a cervical pregnancy treated with intramuscular injection of methotrexate (MTX) and intracardiac administration of potassium chloride (KCl).

### Methods

A 44-year-old woman gravida 2 parite 1 applied to our clinic with vaginal bleeding for 20 days. She had only one previous lower segment cesarean section. Transvaginal ultrasound revealed empty endometrial cavity and a gestational sac within the cervical canal. Inside the sac, a fetal pole consistent with 8 weeks of gestation according to crown-rump length with positive fetal cardiac activity (Figure 1). Serum beta human chorionic gonadotropine ( $\beta$ -hCG) was measured 53990 IU/L. The combination therapy of intramuscular methotrexate (50 mg/m<sup>2</sup>) and intracardiac KCL(2 meq/ml) injections were implemented by ultrasound guidance. And also the amniotic fluid was aspirated concurrently. The second dose of MTX was injected on day 7th because the sonographic image was the same. Following  $\beta$ -hCG levels were decreased gradually. On sonography, we detected collapsed gestational sac and non-homogenous formation in the cervical canal consistent with possible blood clots on day 27th of treatment (Figure 2). The patient was discharged with  $\beta$ -hCG level of 168 IU/L. One week after the discharge, the serum  $\beta$ -hCG level was 33 IU/L and there was only minimal non-homogenous formation in the cervical canal.

### Results

A 44-year-old woman gravida 2 parite 1 applied to our clinic with vaginal bleeding for 20 days. She had only one previous lower segment cesarean section. Transvaginal ultrasound revealed empty endometrial cavity and a gestational sac within the cervical canal. Inside the sac, a fetal pole consistent with 8 weeks of gestation according to crown-rump length with positive fetal cardiac activity (Figure 1). Serum beta human chorionic gonadotropine ( $\beta$ -hCG) was measured 53990 IU/L. The combination therapy of intramuscular methotrexate (50 mg/m<sup>2</sup>) and intracardiac KCL(2 meq/ml) injections were implemented by ultrasound guidance. And also the amniotic fluid was aspirated concurrently. The second dose of MTX was injected on day 7th because the sonographic image was the same. Following  $\beta$ -hCG levels were decreased gradually. On sonography, we detected collapsed gestational sac and non-homogenous formation in the cervical canal consistent with possible blood clots on day 27th of treatment (Figure 2). The patient was discharged with  $\beta$ -hCG level of 168 IU/L. One week after the discharge, the serum  $\beta$ -hCG level was 33 IU/L and there was only minimal non-homogenous formation in the cervical canal.

### Conclusion

Although urgent surgery procedures may be required for cervical pregnancy, conservative management may be chosen for patients with hemodynamically stable.

