# A case of ectopic pregnancy after treatment of cesarean scar pregnancy with methotrxate: case report

Mosconi AP, Nicastro LMZ, De Marcos A, Drummond CL, Zlotnik E, Oliveira RCS Sao Paolo Hospital, Sao Paulo, Brazil

## Objective

The frequency of ectopic pregnancies has been on the rise and it could be related to widespread access to assisted reproductive technologies, greater prevalence of sexually transmitted diseases, increased incidence of pelvic inflammatory diseases, increased rates of cesarean section and uterine procedures. Cesarean scar pregnancy is still considered a new clinical entity, although the first report appeared nearly a quarter of a century ago. The rarity of this condition with medicolegal concerns and a large spectrum of possible outcome (ranges from missed miscarriage, followed by spontaneous resolution to second trimester loss, until /to severe bleeding and hysterectomy) makes difficult counselling women with assymptomatic scar pregnancy. The advantage of a systemic methotrexate (MTX) treatment is: 1. Provides a non invasive treatment option for patients seeking fertility preservation. 2. Treatment may be use in outpatient practices with lower costs. 3. Simplicity of therapy, independence of the skills of the operator and much more. MTX belongs to a class of drugs know as folic acid antagonists that blocks DNA and some extent RNA, synthesis and cell division. As a result, tissues that have a rapid of cell turn over such as trophoblasts are sensitive to treatment with this medication.

#### Methods

Case report.

#### Results

A 40 years old patient, gravida 3, para 1, had a history of cesarean section. She was admitted to our hospital in September/2013 for a dating scan, completely asymptomatic. Ultrasound examination showed a gestacional sac at the level of the cervix, more accurate at the previous cesarean scar, with a 6 weeks embryo with cardiac activity. Quantitative  $\beta$ -hCG level was 6500 IU/L and she was treated with intra amniotic MTX (60mg) guided by ultrasound. The day after, we still could visualize cardiac activity and a second dose of MTX was administered but intramuscular at this time (60 mg). After 2 days, no cardiac beats were seen and the levels of  $\beta$ -hCG concentrations decreased. Five months after this treatment she became pregnant. Ultrasound examination showed a topic gestational sac and embryo with 6 weeks. First trimester scan was done on March/2014 with low risk to aneuploidies and cesarean scar with no significative changes.

### Conclusion

MTX remains to be the most commonly used, as well most effective medication in conservative management of ectopic pregnancy. In cases of embryo viability, the local administration can reduce the total dose decreasing the morbidity and improving the fertility outcome.