Methotrexate use for Ectopic Pregnancy Guidelines
(with 2016 updates)

Methotrexate is a folic acid antagonist and has been widely used in the treatment of ectopic pregnancies. Medical management of ectopic pregnancy with Methotrexate can allow the patient to avoid the risks associated with surgery. These are meant to be guidelines used in conjunction with clinical judgement.

Candidates for Methotrexate
1. Confirmed ectopic pregnancy (or clinically high suspicion)
2. Hemodynamically stable
3. Ectopic mass is not ruptured
4. Patients who will be able to have follow-up visits and lab testing

Absolute Contraindications to Methotrexate Therapy
1. Liver disease including alcoholism
2. Peptic ulcer disease
3. Blood dyscrasias
4. Immunodeficiency
5. Breastfeeding
6. Active pulmonary disease
7. Liver, kidney, or hematologic dysfunction
8. Hypersensitivity to Methotrexate
9. Heterotopic pregnancy
10. Unable or unwilling to complete protocol

Relative Contraindications to Methotrexate Therapy
1. Mass greater than 3.5cm
2. Fetal heart motion
3. Peritoneal fluid

Note: Women with high baseline hCG concentration (greater than 5000 mlU/ml are more likely to require multiple course of medical therapy or experience treatment failure.

Necessary Lab Testing Prior to Methotrexate Therapy
1. Serum creatinine level
2. Liver transaminases
3. Complete blood count
4. Quantitative hCG level

Single-Dose regimen and follow up
The most commonly used regimen is a single dose of Methotrexate of 50mg/m² IM (day 1).

¹ Please see additional OBHG guideline for the evaluation and management of pregnancy of unknown location.
³ UpToDate; “Ectopic pregnancy: Choosing a treatment and methotrexate therapy; T. Tulandi; last updated April 13, 2016; p. 1.
⁴ Ibid; p. 2.
Patients should be counseled about the ongoing risk of tubal rupture. They should avoid NSAIDs, alcohol, and folic acid supplements during therapy. Classically, patients would have a repeat hCG level on days 4 and 7. If the hCG level does not decrease at least 15% between days 4 and 7, then a repeat dose of Methotrexate 50mg/m² IM would be given and repeat the hCG measurements on days 4 and 7. Once the hCG level decreases appropriately, the hCG level should be followed weekly until it reaches the nonpregnant level.

Depending upon the hospital, much of the follow up testing may be performed by our community physician partners.