HEALTH HOLDING
HAFER ALBATIN HEALTH CLUSTER
MATERNITY AND CHILDREN HOSPITAL

Department:	Obstetrics and Gynecology (Ward)		
Document:	Departmental Policy and Procedure		
Title:	Medical Management of Ectopic Pregnancy with Methotrexate		
Applies To:	All Obstetrics and Gynecology Staff		
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1. PURPOSE:

1.1 To standardize the medical treatment for certain patients with ectopic pregnancy.

2. DEFINITIONS:

2.1 **Ectopic pregnancy**- is pregnancy that implants outside the uterine cavity.

3. POLICY:

3.1 Medical management of ectopic pregnancy is carried out using Methotrexate (MTX) in properly selected.
3.2 When MTX used for treatment of ectopic pregnancy, most reported side effects have been mild and self-limiting.
3.3 MTX can be used as single or multiple doses. However, single dose use is more common.
3.4 Receiving MTX for treatment of Ectopic pregnancy should fulfill the following criteria:
- 3.4.1 Hemodynamically stable without active bleeding or signs of hemo-peritoneum.
- 3.4.2 Non-laparoscopic diagnosis.
- 3.4.3 Patient desires future fertility.
- 3.4.4 General anaesthesia poses significant risk.
- 3.4.5 Patient is able to return for follow up care.
- 3.4.6 Patient has no contra-indication to MTX.
- 3.4.7 Unruptured mass <3.5cm at its greatest diameter by ultrasound.
- 3.4.8 No fetal cardiac motion.
- 3.5.9 Absence of a large amount of fluid in pouch of Douglas (>1cm pool relative contraindication).
- 3.4.10 β –HCG (baseline) level does not exceed 3000 IU/ML.

3.5 Contra-indications to medical therapy:
- 3.5.1 Breast feeding.
- 3.5.2 Chronic hepatic or renal disease.
- 3.5.3 Pre-existing blood dyscariasis e.g. bone marrow hypoplasia, leukopenia, thrombocytopenia or significant anemia.
- 3.5.4 Known sensitivity to MTX.
- 3.5.5 Concurrent use of Corticosteroid.

4. PROCEDURE:

4.1 Patient should be an in-patient, initially to monitor patient progress before and after treatment.
4.2 Patient should fulfill criteria and has no contra-indications to MTX.
4.3 Patient should discontinue folic acid supplement if she is taking due to its potential toxicity.
4.4 Blood is drawn for CBC, U&Es, LFT, blood type, Rh factor and presence of antibodies and quantitative β – HCG as baseline.
4.5 If patient is Rh negative and has no anti D Ab's she should receive Anti D immunoglobulin 250mcg IM before initiating MTX treatment to avoid Rh sensitization.

4.6 All blood investigations should be reviewed by the Physician before initiating the treatment.
4.7 MTX should only be ordered by physician.
4.8 MTX is ordered in the dose of 50 mg/ m^2 IM in one single dose. Body surface area (m^2) =√ (height (cm) x weight (kg) / 3600).
(i.e. Commence the calculation inside the brackets & then calculate thesquare root to reach the BSA).
E.g. A women 165cm & 60kg = 165 x 60 = 9900 ÷ 3600 = 2.75
Square root of 2.75 = 1.65, which gives a BSA of 1.65m^2
4.9 Medication is obtained ready and prepared in the syringe with needle from the pharmacy.
4.10 Patients' vital signs are taken before administration of the drug.
4.11 Drug should be given by a physician or a nurse trained in giving MTX.
4.12 Drugs are given in pre-determined dose IM in one buttock.
4.13 Patient is kept as an in-patient for monitoring of signs and symptoms of any side-effects. Vital signs should be taken every 6 hours.
4.13.1 Nausea and vomiting may occur and anti-emetic (e.g. Metoclopramide 10mg IV q8 hrs. PRN) can be given.
4.13.2 Increase in abdominal pain (upto 75% of patients) can occur on day 3-7, mild, lasting for 24-48 hours.
4.13.3 Mild vaginal bleeding or spotting can occur.
4.14 Serum quantitative β –HCG is repeated on day 4 as it is expected to be elevated.
4.15 Serum quantitative β –HCG is repeated on day 7 as it should decline by at least 15% from day 4 to day 7.
4.16 If serum β –HCG plateau or increase on day 7, another dose of MTX 50mg/ m^2 IM can be given and repeat β –HCG in 3 days or switch to surgical management.
4.17 Repeat CBC, U&Es, and LFT on day 7 then on day 14 to monitor any abnormality in organ function due to MTX toxicity. Mild elevation of hepatic enzymes is expected and self-limited.
4.18 If β –HCG declines ≤ 15% between day 4 and day 7, or day 7-10 in repeated doses, then do β- HCG weekly until β –HCG becomes undetectable <12mu/ ml.
4.19 Mean time to resolution is 35 days.
4.20 Avoid vaginal examination. TVS may be undertaken during first treatment week or subsequently.
4.21 Should any pancytopenia develop, moderately or severely disturbed liver enzymes or disturbed renal function occurs.
4.21.1 Report to treating physician.
4.21.2 Discontinue MTX.
4.21.3 Obtain serum MTX level stat, then q6 hrs.
4.21.4 Start Leucovorin calcium 10 mg/ m^2 IV stat dose then q 6 hrs x 48 hrs, or until MTX serum level is below 50 nmol/ L.
4.22 Patient should be instructed:
4.22.1 To avoid prolonged sun exposure while on treatment as MTX increase skin sensitivity.
4.22.2 To report any dizziness, severe headache, syncope or tachycardia.
4.22.3 To avoid vitamins containing folic acid and NSAIDs.
4.22.4 To avoid sexual intercourse while on treatment.

5. MATERIAL AND EQUIPMENT:

5.1 N/A

6. RESPONSIBILITIES:

6.1 Physician
6.2 Nurses
6.3 Pharmacist

7. APPENDICES:

N/A

8. REFERENCES:

8.1 Ministry of Health, Clinical Policies and Procedures, Guidelines for Obstetrics and Gynecology, page no: 460-463.

8.2 Guidelines for management of ectopic pregnancy, RCOG, 2007.

9. APPROVALS:

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