Gestational Trophoblastic Disease Guideline

Reference Number:
NHSCT/12/507

Target audience:
This guideline is directed to obstetricians, gynaecologists, midwives and gynaec nurses

Sources of advice in relation to this document:
Dr R Ashe, Clinical Director
Dr S Nawaz, Consultant Obstetrician

Replaces (if appropriate):
NHSCT Hydatidiform Mole, Follow up information – GGYN5 – 5 2007

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NHSCT Mission Statement
To provide for all the quality of services we would expect for our families and ourselves
Gestational Trophoblastic Disease Guideline

December 2011
Gestational Trophoblastic Disease Guideline

**Aim**
The aim of this guideline is to provide guidance on diagnosis and management of hydatidiform mole.

**Target Audience**
This guideline is directed to obstetricians, gynaecologists, midwives and gynaecology nurses.

**Introduction**
The abnormal proliferation of gestational trophoblast tissue forms a spectrum of disease from the generally benign partial hydatidiform mole through to malignant forms of the illness, choriocarcinoma and placental site trophoblastic tumours. Although these illnesses are all rare (incidence in the UK 1/714 live births), patients generally have successful outcomes with total cure rates in excess of 95%.

**Classification**
The World Health Organisation classification divides trophoblast disease into the pre-malignant and malignant forms as shown below:-

- **Pre-Malignant**
  - Partial Molar Pregnancy
  - Complete Molar Pregnancy

- **Malignant**
  - Invasive mole
  - Choriocarcinoma
  - Placental site trophoblastic tumours

**Diagnosis**
The classic features of molar pregnancy are:
- Irregular vaginal bleeding
- Hyperemesis
- Excessive uterine enlargement
- Early failed pregnancy.

Rarer presentations include:
- Hyperthyroidism
- Early onset pre-eclampsia
- Abdominal distension.
Ultrasound examination is helpful in making a pre-evacuation diagnosis but the definitive diagnosis is made by histological examination of the products of conception. The diagnosis may only be made in 35-40% on ultrasound. The histological assessment of material obtained from the medical or surgical management of all failed pregnancies is recommended to exclude trophoblastic disease.

A urinary pregnancy test should be performed 3 weeks after medical or surgical management of failed pregnancy if products of conception are not sent for histology.

Evacuation of molar pregnancy

- Suction curettage is the method of choice of evacuation for complete molar pregnancies and partial molar pregnancies except when the size of fetal parts deters the use of suction curettage and then medical evacuation can be used.
- Preparation of the cervix immediately prior to evacuation is safe. Prolonged cervical preparation should be avoided to reduce the risk of embolization of trophoblastic cells.
- Excessive bleeding can be associated with molar pregnancy and a senior surgeon directly supervising surgical evacuation is advised.
- Oxytocic infusion prior to completion of the evacuation is not advised.
- If evacuation is followed by excessive bleeding, a single dose of oxytocin can be used after complete evacuation.

Anti-D prophylaxis is required after evacuation of a molar pregnancy.

Follow up

In the UK follow-up is centralised in 3 centres. In the Northern Trust all patients diagnosed with GTD are registered with Charing Cross Hospital who will arrange follow up with the patient directly. Email and paper referral are possible. The patient should be informed of the diagnosis and need for follow up by the referring team promptly as Charing Cross contact her directly within a few days. She should be advised to use barrier methods of contraception until hCG levels revert to normal. A patient information leaflet is available in OPD to help explain the condition.

Advice from Charing Cross Hospital to the women and referring clinicians is on the following pages.
Hydatidiform Mole - Follow-up Information

All cases of Hydatidiform Mole are registered with
Trophoblastic Tumour Screening and Treatment Centre
Medical Oncology Dept, Charing Cross Hospital, Fulham Palace Road,
LONDON W6 8RF.
Telephone: 0208 846 1409
who have prepared the following information leaflet for patients:

Clinical Co-ordinator: Marianne Foskett
Clinical Research Assistants: Delia Short Sandra Fuller Philippa Rowden

As you have been registered with us for follow-up after a hydatidiform mole pregnancy, we thought that the following information might be of help to you.

1. What is a Mole?

In the UK mole pregnancies occur at approximately 1 per 1000 registered births. It is known that the pregnancy goes wrong at the time of fertilisation of the egg by the sperm, but we don't yet know why this happens. There are 2 types of mole. It can be a "complete mole" in which there is no fetus (baby) at any time. Instead the placenta (afterbirth) grows as a series of cysts which look rather like grapes (hydatid means watery cyst). It can also be a "partial mole" in which there is evidence of a fetus although it cannot usually survive.

2. Why do I need follow-up?

Because there is a risk of molar tissue persisting in the uterus (womb) and of it growing and spreading, special tests are done after mole pregnancies. These tests will show whether or not the mole is dying out. In 90% of women the tests return to the normal range with no further problems. Samples of blood and urine for the tests are requested every two weeks until they are normal. Once your test is normal we only need urine at four weekly intervals. If blood is not requested with your sample then your result is normal. In about 1 in 10 women with a mole the tests will show that the mole is not dying out on its own. These women will need specialised treatment, usually given here at Charing Cross Hospital, normally resulting in a complete cure with no loss of fertility.

3. How Long?

We do the tests for a period of 6 months or 2 years. If your tests reach normal within 8 weeks of evacuation of the mole follow-up will be for 6 months, otherwise follow-up will be for 2 years but in the second year we only request urine samples at intervals of 3 months.
4. Future Pregnancies

If you are in the 6 month follow-up group you can try for a baby once your follow-up has been completed. If you are in the 2 year follow-up group then you can try once you have had 6 months of normal samples. However, you should always consult your own doctors first. The chance of another mole occurring is very low (1 in 74). It is also important that you send us 2 samples after any future pregnancy as there is a small increase in the risk of disease occurring or recurring at this time (urine at 6 weeks, serum at 10 weeks). These tests are to make sure all is well and should be sent whether your pregnancy goes to term or not.

5. Contraception

Certain hormones seem to increase the risk factors so we strongly advise you not to take oral contraceptives (The Pill) or any other hormonal preparation until your blood and urine tests have returned to normal. Sometimes there may be no alternative and if your doctor prescribes these she/he will usually have good reason. The sheath (condom) should be used for contraceptive purposes meanwhile.

6. Any other questions?

Well-meaning friends and relatives, or other patients, may tell you things that can be alarming and often inaccurate. Try to get your advice from the doctors, nurses or other people who have seen many women who have had this problem. You are very welcome to phone this office for advice or an update on your results.
Hydatidiform Mole Follow-up

The following notes have been prompted by enquiries we have received relating to these patients. hCG follow-up will range from 6 months to 2 years after evacuation of hydatidiform mole. The patient is contacted directly to send in her samples.

Serum samples are requested by this laboratory at 2 weekly intervals post-evacuation, until normal values are obtained. Following these, urine samples are requested at 4 weekly intervals until 1 year post evacuation and then every 3 months in the second year of follow-up. Further serum samples are only requested if subsequent hCG become abnormal.

(Normal values: Urine hCG 0 - 24 units/l. Serum hCG 0-4 units/l)

If the patient's hCG values reach normal range within 8 weeks of evacuation, follow-up will be limited to 6 months. Sequelae have not so far been observed in these patients. The majority of patients with partial hydatidiform mole, and patients with lesions suspicious of HM, fall into this short term follow-up group. It also includes some patients with complete hydatidiform mole.

Patients in the 6 month follow-up group need not be further delayed in starting a new pregnancy.

Patients who do not have normal hCG values within 8 weeks of evacuation should have the 2 year follow-up. For patients in this group who are eager to go ahead with a further pregnancy, it may be judged reasonable to allow this after hCG has been normal for 6 months. In this group the risk of choriocarcinoma occurring after hCG has been normal for 6 months is 1:286.

Further estimations of hCG 6 weeks and 10 weeks after any future pregnancies are requested because of a small increase in risk of choriocarcinoma developing in such patients. In some cases the choriocarcinoma arises from the new pregnancy.

Assay results are sent to the patient's Gynaecologist and GP. The patient is also invited to telephone for results.

WHO Classification for Trophoblastic Disease

<table>
<thead>
<tr>
<th>Pre-Malignant</th>
<th>Malignant</th>
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<tbody>
<tr>
<td>Partial Molar Pregnancy</td>
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<td>Choriocarcinoma</td>
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<tr>
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<td>Placental Site Trophoblastic Disease</td>
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Do you need to take any action on results?

We will monitor all patients very closely. If there is an indication for chemotherapy (see below) the Gynaecologist will be contacted in the first instance. Sometimes with the permission of the Gynaecologist we will contact the patient directly to arrange admission to Charing Cross Hospital. We also endeavour to ensure the GP is informed.

**Indications for chemotherapy**

Patients requiring chemotherapy will meet one or more of the following criteria:

1. Serum hCG > 20,000 at >4 weeks post evacuation.
2. Rising hCG. i.e. 2 consecutive rising serum samples.
3. hCG plateau i.e. 3 consecutive serum samples not rising or falling significantly.
4. Heavy haemorrhage and/or severe abdominal pain.
5. hCG still abnormal at 6 months post evacuation
6. Brain, liver, GI Mets or Lung mets >2cm on CXR
7. Histological evidence of choriocarcinoma
8. Pulmonary, vulval or vaginal mets unless the hCG level is falling

**Hormonal preparations for contraceptive or other purposes taken between evacuation of the mole and the return to normality of hCG values appear to increase the risk of invasive mole or choriocarcinoma developing. It is suggested that these be avoided until hCG has become normal in serum. (i.e. <5 units/l)**

IUCD should not be used until hCG levels are normal to reduce the risk of uterine perforation.

INTERNET  [http://www.hmole-chorio.org.uk](http://www.hmole-chorio.org.uk)

**References**

RCOG Green-top Guidelines No 38- The Management of Gestational Trophoblastic disease Feb 2010
Hmole-chorio.org.uk

**Responsibilities**

Directors are responsible for the dissemination and implementation of this guidance within the directorates.

Line managers are responsible for ensuring that staff have a working knowledge of and adhere to the guidance and that any amendments are disseminated.

All practitioners are responsible for familiarising themselves with and adhering to this guidance.
Equality, Human Rights and DDA

The policy is purely clinical/technical in nature and will have no bearing in terms of its likely impact in equality of opportunity or good relations for people within the equality and good relations categories.

Sources of advice in relation to this policy

The guideline author, responsible assistant director or director as detailed on the guideline title page should be contacted in relation to any queries on the content of this guideline.

Alternative Formats

This document can be made available on request on disc, larger font, Braille, audio cassette and other minority languages to meet the needs of those who are not fluent in English.