The Shrewsbury and Telford Hospital NHS Trust

Gestational Trophoblastic Disease (Hydatidiform Mole)

Version 5

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For Triennial Review

Version	Implementation Date	History	Ratified By	Full Review Date
1	February 2005	New	Gynae Clinical Governance	February 2007
2	24th June 2011			June 2014
3	20th January 2016	Full review	Gynae Governance	Jan 2019
4	October 2019	Full Review		
5	21st January 2025	Full review in line with RCOG guideline	Gynae/ fertility Clinical Governance	Jan 2028

1.0 Introduction

1.1 Molar pregnancies are uncommon and can be a very frightening complication of pregnancy.

1.2 The majority of women present with symptoms of early pregnancy failure, while presentation with hyperemesis, early severe pre-eclampsia and hyperthyroidism is very rare.

1.3 It is essential that patients receive correct treatment and are subsequently registered at a designated centre for a follow up treatment programme.

1.4 Undiagnosed and untreated molar pregnancy can lead to life threatening bleeding, or progress to gestational trophoblastic neoplasia.

2.0 Aims

2.1 The aim of this guideline is to ensure that optimum care is given and to provide a framework for appropriate management.

3.0 Objectives

3.1 To ensure correct management is given to all patients.

3.2 To provide accurate advice regarding risk factors.

3.3 To ensure safety of the patient at all times.

3.4 To provide psychological support.

4.0 Definitions

4.1 **Molar Pregnancy** occurs when the trophoblastic tissue shows an abnormal overgrowth usually associated with very high HCG levels.

4.2 **Hydatidiform Mole** can be sub-divided into complete and partial mole.

4.3 **Complete Mole** has no evidence of fetal tissue.

4.4 **Incomplete Mole** usually has evidence of a fetus or fetal red blood cells. (RCOG Guidelines No. 38).

5.0 Process

5.1 Diagnosis

- A definitive diagnosis of Hydatidiform Mole will only be made on histology.
- Features pre-operatively that suggest a diagnosis of GTD include:
    - Ultrasound Features
    - Significantly raised HCG in the absence of a defined intrauterine pregnancy

5.2 How do molar pregnancies present to the clinician?

- Clinicians should be aware of the symptoms and signs of molar pregnancy. The most common presentation is irregular vaginal bleeding, a positive pregnancy test and supporting ultrasonographic evidence.
    - Ultrasound features suggestive of a complete molar pregnancy include a polypoid mass between 5 and 7 weeks of gestation and thickened cystic appearance of the villous tissue after 8 weeks of gestation with no identifiable gestational sac.
    - Partial molar pregnancies are associated with an enlarged placenta or cystic changes within the decidual reaction in association with either an empty sac or a delayed miscarriage.
- Less common presentations of molar pregnancies include hyperemesis, excessive uterine enlargement, hyperthyroidism, early-onset pre-eclampsia and abdominal distension due to theca lutein cysts.
- Very rarely women can present with haemoptysis or seizures due to metastatic disease affecting the lungs or brain.

5.3 How are molar pregnancies diagnosed?

- The definitive diagnosis of a molar pregnancy is made by histological examination.
    - Pathological features consistent with the diagnosis of complete molar pregnancies include: absence of fetal tissue; extensive hydropic change to the villi; and excess trophoblast proliferation
    - Features of a partial molar pregnancy include: presence of fetal tissue; focal hydropic change to the villi; and some excess trophoblast proliferation.

5.4 What is the initial management of suspected GTD

- The patient should be reviewed and counselled by a senior gynaecologist.
- Send Serum BHCG measurement along with FBC, G&S, Thyroid function tests.
- Results and ultrasound to be discussed with Consultant on call or Early Pregnancy Lead Consultant.
- Where diagnosis is uncertain in a well patient, make appointment for next available consultant led EPAS scan list
- Where the clinical picture is suggestive of gestational trophoblastic disease, Surgical Management of Miscarriage under general anaesthetic should be discussed and offered as first line management.
- The procedure should be performed by an experienced Gynaecologist. (See Surgical Management of Miscarriage guideline). ***All*** tissue to be sent to laboratory in formalin for histology examination.
- Ensure SD1 form is completed.
- Consent should be taken and documented from the patient to allow referral to the regional trophoblastic centre should the suspicions be confirmed.

5.5 What is the best method for removal of a molar pregnancy?

- Suction curettage is the method of choice for removal of complete molar pregnancies.
- Ultrasound guidance during removal and curettage may be of use to minimise the chance of perforation and to ensure that as much tissue as possible is removed, however is not mandatory, particularly in an emergency.
- Suction curettage is the method of choice for removal of partial molar pregnancies except when the size of fetal parts deters the use of suction curettage and then medical removal can be used.
- Anti-D prophylaxis is recommended following removal of a molar pregnancy.

5.6 Surgical management of GTD

- Suction curettage is the method of choice of evacuation for complete molar pregnancies.
- Suction curettage is the method of choice of evacuation for partial molar pregnancies except when the size of the fetal parts deters the use of suction curettage and then medical evacuation can be used.
- A urinary pregnancy test should be performed 3 weeks after medical management of failed pregnancy if products of conception are not sent for histological examination.
- Preparation of the cervix with misoprostol immediately prior to evacuation is safe however prolonged exposure to pre-operative prostaglandins should be avoided.
- Excessive vaginal bleeding can be associated with molar pregnancy and a senior surgeon directly supervising surgical evacuation is advised.
- The use of oxytocic infusion prior to completion of the evacuation is not recommended.
- If the woman is experiencing significant haemorrhage prior to evacuation, surgical evacuation should be expedited and the need for oxytocin infusion weighed up against the risk of tumour embolisation.
- Anti-D prophylaxis is required following evacuation of a suspected molar pregnancy as per Anti-D guideline.

5.7 Management of histologically confirmed (or suspected) GTD

- Patient to be registered at Weston Park Hospital at Sheffield (see criteria in section 5.6). This is of ***high importance*** and registration is to be done ASAP – this can be completed online (http://stdc.group.shef.ac.uk/clin.html) and should be done by the operating surgeon, or the oncall gynaecologist if they are not available.
- Verbal Consent for the referral should be taken by the operating surgeon, or the gynaecologist on call if this is not possible and not already done before the procedure.
- Offer appointment in EPAS consultant clinic at 2/52 post ERPC to discuss findings and follow up treatment.
- The diagnosis and current management should be sent to the GP by the managing consultant either by creating a GATU discharge summary, or a dictated letter.
- Continue management as per Weston Park Hospital (Sheffield) Protocol.

5.8 What are the criteria for referral to Sheffield trophoblastic centre?

- Complete hydatidiform mole
- Partial hydatidiform mole
- Twin pregnancy with complete or partial hydatidiform mole
- Limited macroscopic or microscopic molar change suggesting possible partial or early complete molar change
- Choriocarcinoma
- Placental-site trophoblastic tumour (PSTT) or ETT
- Atypical placental site nodules: designated by nuclear atypia of trophoblast, areas of necrosis, calcification and increased proliferation (as demonstrated by Ki67 immunoreactivity) within a placental site nodule
- Referral to a GTD centre should be considered for all women with persistently elevated hCG either after an ectopic pregnancy has been excluded, or after two consecutive treatments with methotrexate for a pregnancy of unknown location.

5.9 In what circumstances should a repeat surgical removal be indicated and what is the timing?

- There is almost always a role for urgent surgical management for the woman who is experiencing heavy or persistent vaginal bleeding causing acute haemodynamic compromise, particularly in the presence of retained pregnancy tissue on ultrasound.
- Outside the context of acute compromise, there should be consultation with the relevant GTD referral centre before performing surgical management for the second time in the same pregnancy.

5.10 How is twin pregnancy of a viable fetus and presumptive coexistent molar pregnancy managed?

- Women diagnosed with a combined molar pregnancy and viable twin, or where there is diagnostic doubt, should be referred to a regional fetal medicine centre and GTD centre.
- In the situation of a twin pregnancy where there is one viable fetus and the other pregnancy is molar, the woman should be counselled about the potential increased risk of perinatal morbidity and the outcome for GTN.
- Prenatal invasive testing for fetal karyotype should be considered in cases where it is unclear if the pregnancy is a complete mole with a coexisting normal twin or a possible singleton partial molar pregnancy. Prenatal invasive testing for fetal karyotyping should also be considered in cases of abnormal placenta, such as suspected mesenchymal hyperplasia of the placenta

5.11 How should a placental site nodule or atypical placental site nodule be managed?

- Women with an atypical PSN or where the local pathology is uncertain should have their histology reviewed centrally. All women with atypical PSN will then be called up for central review to discuss the existing data, perform staging investigations and to determine further management. Women with typical PSN do not currently require further investigation or review.

5.12 How should suspected ectopic molar pregnancy in women be managed?

- Cases of women with ectopic pregnancy suspected to be molar in nature should be managed as any other case of ectopic pregnancy. If there is a local tissue diagnosis of ectopic molar pregnancy, the tissue should be sent to a centre with appropriate expertise for pathological review.

5.13 What is the optimum follow-up following a diagnosis of GTD?

- Data analysis of over 17,000 women diagnosed with a Complete Hydatidiform Mole in the UK shows that:
- If the hCG level normalises within 56 days from the date of evacuation, with a follow up confirmatory normal blood hCG 4 weeks later, the detection rate of persistent disease is extremely low.
- Therefore, for women diagnosed with a complete mole with hCG normalisation within 56 days of the date of the evacuation, the national gestational screening service has deemed it is safe to no longer require hCG monitoring for a 6 month period. (NEW 2023)
    - These women can be discharged once their blood and a confirmatory hCG level is normal.
    - They can try again for a new pregnancy.
- If hCG has not reverted to normal within 56 days of the pregnancy event then follow-up will be for 6 months from normalisation of the hCG level.
- Follow-up for partial molar pregnancy is concluded once the hCG has returned to normal on two samples, at least 4 weeks apart.
- Women who have not received chemotherapy no longer need to have hCG measured after any subsequent pregnancy event.

5.14 Patient Involvement and advice

- All patients are to be seen by a member of the EPAS staff and a Badgernet workflow completed
- Scan findings and HCG results to be discussed with patient and need for products to be sent to the laboratory.
- Surgical management leaflets to be given to patient.
- Patient to be explained at all levels care pathways and risk factors associated.
- Patient should be advised not to plan future pregnancies during treatment under care of Sheffield.
    - Effective contraception should be recommended
    - A diagnosis of treated GTD is not by itself a contra-indication to the Combined Oral Contraceptive pill if it has already been commenced.
- Further support to patient and partner to be made available. Contact telephone numbers to be given.

6.0 Training

6.1 Updated guideline is circulated to the care group for consultation

6.2 All staff employed by SATH will be informed how to access guidelines on the intranet

6.3 Information regarding new and updated guidelines is circulated by email/memo to medical and nursing staff

7.0 References

Tidy J, Seckl M, Hancock BW, on behalf of the Royal College of Obstetricians and Gynaecologists. Management of Gestational Trophoblastic Disease. *BJOG* 2021; 128: e1–e27.

Weston Park (Sheffield) Hospital. Trophoblastic Disease Guidelines (https://stdc.sites.sheffield.ac.uk/clinicians#h.afrhdyxtye6d)

Appendix 1 Auditable topics

- Proportion of women with GTN registered with the relevant screening centre (100%), including:
    - –complete molar pregnancy/partial molar pregnancy
    - –twin pregnancy with complete or partial molar pregnancy
    - –limited macroscopic or microscopic molar change suggesting possible complete or partial molar pregnancy/choriocarcinoma
    - –PSTT or ETT
    - –atypical PSNs.
- Proportion of women with a histological diagnosis of complete molar pregnancy who have an ultrasound diagnosis of molar pregnancy prior to uterine removal (>85%)
- Proportion of women who undergo medical management for removal of pregnancy tissue with an ultrasound diagnosis of complete molar pregnancy (<5%)

Appendix 2 Useful links and support groups

- Royal College of Obstetricians and Gynaecologists. *Gestational trophoblastic disease. Information for you.* London: RCOG; 2011.
- Molar Pregnancy – Support & Information [**http://www.molarpregnancy.co.uk**].
- Charing Cross Gestational Trophoblast Disease Service [**www.hmole-chorio.org.uk/**].
- The Sheffield Trophoblastic Disease Centre [**http://stdc.group.shef.ac.uk/**].
- Tommy's –Molar pregnancy stories [**https://www.tommys.org/pregnancy-information/pregnancy-complications/pregnancy-loss/molar-pregnancy/molar-pregnancy-stories**].
- Miscarriage Association [**www.miscarriageassociation.org.uk/information/molar-pregnancy/**].