



The Royal Australian and New Zealand College of Obstetricians and Gynaecologists

Excellence in Women's Health

# Gestational Trophoblastic Disease (GTD) or Molar Pregnancy

## What is GTD?

GTD is a rare complication of pregnancy that occurs in about 1 out of every 200–1000 pregnancies. It is also called a 'Molar Pregnancy'.

The most common type of GTD is a Hydatidiform Mole. It is not like a mole on your skin. It is just a term used to describe the abnormal growth of the placenta (that part of the pregnancy that usually feeds the baby). The overgrowing placenta produces high levels of pregnancy hormones so the woman 'feels' pregnant and has symptoms of pregnancy.

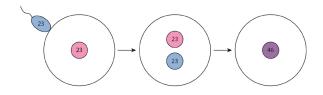
Sadly, a molar pregnancy is a type of pregnancy loss as the baby either does not develop at all or develops abnormally and cannot survive. The loss of your baby is likely to make you feel a number of emotions. You may feel very sad, this may be the first time you have heard of this condition and so you may also feel shocked, confused and anxious about the future.

The purpose of this pamphlet is to explain fully what a molar pregnancy is, and why it is necessary to be followed up by a specialist gynaecologist obstetrician. It is important that you understand exactly what has happened to you, and what treatment is required.

# How a normal pregnancy develops

In a **normal pregnancy**, the mother's egg is fertilised by one sperm from the father. The resulting conception has one set of genes from the mother and one set from the father. The pregnancy may continue as normal with a developing baby and a normal placenta.

The baby grows and his or her organs gradually become able to function on their own and, after about 40 weeks since the last period, he or she is born.

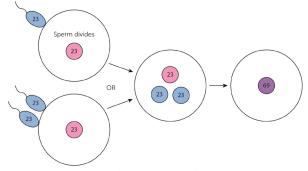


Normal pregnancy conception, 2 sets of genes

# There are different types of Hydatidiform Moles

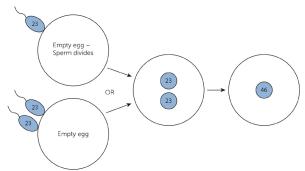
Many pregnancies, possibly 50 to 60 percent, are lost before they can implant, or within the first three months. This is called a miscarriage. Rarely, other problems can arise and **molar pregnancy** is one of these.

In the case of a **Partial Hydatidiform Mole (PHM)**, the mother's egg is fertilized by two sperm from the father or the one sperm from the father replicates in the mother's egg (see diagram). The baby has three sets of genes instead of two. The baby may start to develop but it is always abnormal and cannot survive (triploidy). The placenta grows abnormally in this type of pregnancy.



Partial Mole – 3 sets of genes (1 maternal and 2 paternal).

In the case of a **Complete Hydatidiform Mole** the mother's egg is empty and is fertilized by two sperm from the father or the one sperm from the father replicates in the mother's egg (see diagram). There is no baby and the placenta grows abnormally in this type of pregnancy



Complete Mole, no fetus – 2 sets of genes (0 maternal and 2 paternal)

# Gestational Trophoblastic Disease (GTD)



#### Who is affected?

Anyone who falls pregnant can be affected by GTD but it is more common in women who are from an Asian background.

## **How is GTD diagnosed?**

The most common ways that women are diagnosed are:

- Vaginal bleeding in pregnancy like a miscarriage
- On ultrasound (scan)
- Excessive morning sickness needing hospital admission (this is because the placenta is growing at a rate faster than normal that makes more pregnancy hormones)

#### How is it treated and monitored?

The treatment is to remove the abnormal pregnancy from the uterus (womb). This procedure is called a curette (D&C), which is performed under a general anaesthetic (you will be asleep). The cells from the D&C are tested in a laboratory for GTD. After the diagnosis of a molar pregnancy/GTD it is important to have follow up and monitoring. The D&C is sufficient treatment in the majority of GTD. Follow up and monitoring means having blood tests initially on a weekly basis to check that the pregnancy hormone levels return to normal and stay that way for up to six months.

#### Will I need further treatment?

Depending on the type of molar pregnancy between 4-15% of women will develop persistent disease that needs more treatment. This is called Gestational Trophoblastic Neoplasia (GTN). This means that abnormal cells have developed despite the curette. The abnormal cells can travel to other parts of the body, therefore your doctor will arrange for you to have scans. The treatment of women with persistent disease is usually several courses of chemotherapy until blood tests return to normal. The best way to detect GTN early is to follow the advice of your doctor and have the regular follow up blood tests as

The best way to detect GTN early is to follow the advice of your doctor and have the regular follow up blood tests as recommended. Detecting GTN early before it has spread gives the best chance of curing low risk GTN.

## Can I have another baby?

Yes, definitely if you wish, but it is advisable to wait until you are given the OK from your treating team. You may also feel like you are "in limbo", unable to move on after this pregnancy and having to delay trying again. It is important that you do not get pregnant during the follow up period. It is OK to use whatever form of reliable contraception that you and your partner wish, including the oral contraceptive pill.

When you fall pregnant, you will need an early ultrasound scan (6-8 weeks), to confirm everything is okay. You will need a blood test 6 weeks after the pregnancy has ended (live birth, miscarriage or ectopic).

#### Can the disease come back?

Following a diagnosis of GTD or GTN, the disease can recur. Your hormone levels will be monitored for 6 months after GTD (Complete Mole) and for 12 months after chemotherapy treatment for GTN.

After any subsequent pregnancy you can still get GTN. You will therefore require a blood test to check your hormone levels 6 weeks after the pregnancy has ended regardless of the outcome of that pregnancy (live birth, miscarriage, ectopic etc).

# **Special Circumstances**

There are other types of GTN. These types are rarer and include Placental-Site Nodule, Placental-Site Trophoblastic Tumour (PSTT), Choriocarcinoma and Epithelial Trophoblast Tumour (ETT). These conditions may require other types of treatment with more specialised treatment teams.

# Where can I get more information?

Your treating team will be able to answer most of your questions. We understand that the experience of a molar pregnancy can be very distressing. Not only have you lost your baby, but also you need to have continued medical follow-up to check your hormone levels. This may mean a lengthy period of stress and anxiety. If you would like to talk to someone who can offer support, please contact your specialist maternity team.



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