

Pregnancy related cancer

Gestational trophoblastic disease is the term for a number of pregnancy conditions that involve the placental (afterbirth) tissue turning cancerous or cancer-like. This cancer occurs in one in every 1,200-1,500 pregnancies. The main symptoms are violent morning sickness or abnormal bleeding in pregnancy or after a curette for a miscarriage.

The tumour is called a mole, and the pregnancy is known as a molar pregnancy. In most cases, the woman miscarries and passes the mole from her body, or it is removed with a D&C (dilatation and curettage).

In other cases, the mole becomes cancerous and can spread to other parts of her body. A key symptom of gestational trophoblastic disease is violent morning sickness, caused by higher than normal levels of the pregnancy hormone human chorionic gonadotrophin (HCG). The cause of gestational trophoblastic disease is unknown, but risk factors include maternal age - women aged less than 20 years or more than 40 years are most susceptible.

Symptoms

The symptoms of gestational trophoblastic disease can include:

- Vaginal bleeding during pregnancy
- The uterus is either too big or, less commonly, too small for the gestational age of the fetus
- No fetal movement
- No fetal heartbeat
- Extremely severe morning sickness
- Ultrasound reveals a 'blighted ovum'.

Risk factors

The cause of gestational trophoblastic disease is unknown, but risk factors include:

- Pregnancy
- Maternal age of less than 20 or more than 40 years
- Race, since Asian women are at increased risk
- Dietary deficiencies including lack of folate, beta-carotene or protein
- Prior history of gestational trophoblastic disease. The recurrence rate is one in 100.

Formation of the hydatidiform mole

The cells of the developing fetus split into two broad groups - one group becomes the body and the other becomes the placenta. The placenta has millions of tiny finger-like projections (villi) that are designed to 'dig in' to the womb wall and tap into the mother's blood supply.

In gestational trophoblastic disease, the fetus doesn't grow but the placenta grows abnormally. The villi swell and look like little blisters. These blisters are called a hydatidiform mole, and the pregnancy is called a molar pregnancy.

The woman experiences the symptoms of pregnancy because the placenta continues to make the pregnancy hormone human chorionic gonadotrophin (HCG). However, the level of HCG is extremely high, which explains the violent morning sickness. In some cases, the morning sickness is so severe that hospitalisation is needed.

Possible complications of the hydatidiform mole

The hydatidiform mole can cause a wide range of complications including:

- Haemorrhage
- Ovarian cysts
- Breathlessness, when it spreads to the lungs
- Pre-eclampsia (toxaemia of pregnancy), involving toxins in the blood that raise blood pressure and affect the kidneys and (sometimes) liver function
- Recurring gestational trophoblastic disease
- Excess thyroid hormone production, which causes heart palpitations and other thyroid hormone effects.

A range of serious conditions

If the mole isn't miscarried completely, it can progress and cause a range of serious conditions, including:

- **Regrowth** - persistent mole regrowth of the placental tissue.
- **Invasive mole** - the tumour spreads into the wall of the uterus.
- **Metastatic mole** - cancer cells migrate to other organs of the body and cause secondary tumours. The lungs are common sites for metastatic moles.
- **Gestational choriocarcinoma** - a rapidly spreading type of cancer that can travel to any part of the body via the blood vessels or lymphatic system.

Diagnosis may be difficult

Gestational trophoblastic disease can be hard to diagnose for a number of reasons including:

- A woman who experiences a miscarriage will not know whether or not she passed a hydatiform mole unless the aborted tissue is examined in a laboratory.
- If recent pregnancy, labour and birth were normal, there is often no reason to suspect gestational trophoblastic disease until symptoms become apparent.

Diagnosis methods

Gestational trophoblastic disease is diagnosed using a number of tests including:

- Medical history, which could include current pregnancy or recent childbirth, miscarriage or abortion
- Physical examination
- Blood test to check for high levels of the pregnancy hormone human chorionic gonadotrophin (HCG)
- Ultrasound
- Other scans including x-rays, CT or MRI if it is thought the cancer may have spread to other areas of the body.

Treatment options

Promptly treated, molar pregnancies are curable in 100 per cent of cases. Treatment options depend on various factors, including whether or not the tumour has spread to other areas of the body, but could include:

- **Dilatation and curettage (D&C)** - the cervix is gently opened and the uterine contents are removed.
- **Hysterectomy** - if a woman doesn't want any more children, the surgical removal of her uterus may be recommended.
- **Cancer treatment** - if the cancer has spread to other parts of the body, radiation therapy and chemotherapy will be needed.

Gestational trophoblastic disease can recur

Gestational trophoblastic disease can recur, so regular check-ups are needed. The primary test for the disease is the blood test for HCG. If the HCG levels remain high for a certain amount of time, then the mole may have returned. It is important to strictly avoid pregnancy for at least the first year or so following treatment, because a normal pregnancy will produce HCG and make the blood test for gestational trophoblastic disease ineffective.

Where to get help

- Your doctor
- Women's health clinic
- Family Planning Victoria Tel. (03) 9257 0100
- Cancer Council Victoria Tel. 131 120

Things to remember

- Gestational trophoblastic disease is the term for a number of pregnancy conditions that involve the fetal tissue turning cancerous or cancer-like.
- The main symptom of pregnancy related cancer is violent morning sickness.
- The cause is unknown, but risk factors include maternal age of less than 20 years or more than 40 years.
- Gestational trophoblastic disease can recur, so regular check-ups are needed.

This page has been produced in consultation with, and approved by:

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