

Gestational Trophoblastic Disease (GTD)

Types of Gestational Trophoblastic Disease (GTD):

Benign

Non-Cancer

Molar Pregnancy

When sperm and an egg join without resulting in a pregnancy. It instead becomes a cluster of cysts. In about 1 out of 5 women GTD will become malignant-cancer (women's cancer network.org)

Cancer

Abnormal, rapidly reproducing cells.

Invasive Mole

The myometrium is the outside muscle layer of the uterus. The abnormal cells from the placenta can invade this layer. Often you have symptoms if this happens.

- irregular vaginal bleeding,
- cysts on your ovaries,
- an enlarged uterus, or
- constantly raised hCG levels.

Sometimes, this can be seen on ultrasound or MRI.

Choriocarcinoma

These cancerous placental tumor cells grow fast. They attack blood vessels early. It is more likely to spread to other organs such as lung, liver, and brain.

These cancerous cells are very fragile. They often cause bleeding. Symptoms of this type of GTD are most often related to bleeding in the affected organ or organs.

Placental-site Trophoblastic Tumor (PSTT)

PSTT is a rare form of GTD. It is caused by a different type of placenta or trophoblastic cell called an intermediate trophoblast. These cells make very little of the pregnancy hormone (hCG). The hCG blood level is very low or normal. These tumors most often are in the uterus. PSTT does not respond very well to chemotherapy. It is most often treated with surgery.

Staging

Stage I — All patients with constant elevated beta-hCG levels and tumor confined to the uterus.

Stage II — The presence of tumor outside of the uterus, but limited to the vagina and/or pelvis.

Stage III — Pulmonary metastases with or without uterine, vaginal, or pelvic involvement.

Stage IV — All other metastatic sites such as the brain, liver, kidneys, and gastrointestinal tract.

Modified WHO prognostic scoring system as adapted by FIGO (International Federation of Gynecology and Obstetrics)

Scores	0	1	2	4
Age	<40	>40		
Antecedent pregnancy	Mole	Abortion	Term	
Interval months from index pregnancy	<4	4–7	7–13	>13
Pretreatment Serum hCG (IU/L)	<1000	<10,000	<100,000	>100,000
Largest tumor size (including uterus)		3–<5 cm	>5 cm	
Site of metastases	Lung	Spleen/kidney	GI	Liver/brain
Number of metastases	–	1–4	5–8	>8
Previous failed chemotherapy			Single drug	2 or more drugs

Format for reporting to FIGO Annual Report: In order to stage and allot a risk factor score, a patient's diagnosis is allocated to a stage as represented by a roman numeral I, II, III, and IV. This is then separated by a colon from the sum of all the actual risk factor scores expressed in arabic numerals; e.g., stage II:4, stage IV:9. This stage and score will be allotted for each patient. (Berkowitz, R.S. & Goldstein, D.S.)

Treatment

Treatment is based on

- the size and location of the tumor,
- the results of hCG levels,
- the stage of the disease,
- your age,
- your general health,
- your wishes about future fertility.

Single Agent Chemotherapy

A single agent chemotherapy is a medicine used by itself for treatment. The medicines most often used in this way are methotrexate injection into the vein or muscle, or actinomycin-D injection in the vein. Single agent chemotherapy is used for treatment of persistent GTD.

Multi Agent Chemotherapy

Multi agent chemotherapy is used when the patient's tumor is resistant to single agent medicine. They need more than one medicine for treatment. It is used for high risk patients who have stage II or III disease or in patients who have stage IV disease. The most common medicines are etoposide/VP-16, methotrexate, actinomycin-D, vincristine, and cyclophosphamide. All of these are given as injections into the vein.

Surgery

Hysterectomy (removal of the uterus) is a treatment for various forms of GTD if you do not wish to preserve fertility.

Radiation

This is generally used to treat metastases (cancer that has spread) to the brain.

References

Berek & Hacker. (2010). *Gynecologic Oncology*. 5th Ed. Lippincott Williams and Wilkins, Philadelphia, PA.

Berkowitz, R.S., Goldstein, G.P. (2009). Current management of gestational trophoblastic diseases. *Gynecologic Oncology*, 112, pp 654-662.

Women's Cancer Network, Retrieved at www.wcn.org. *Educational Materials: GTD*, 2009

If you are a patient receiving care at UnityPoint – Meriter, Swedish American or a health system outside of UW Health, please use the phone numbers provided in your discharge instructions for any questions or concerns.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright ©5/2019. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7134.