# Diagnostic/Follow-Up Guidelines
# Gestational Trophoplastic Neoplasia

## March 2021

These guidelines are intended to assist in diagnosis and follow-up care and are not to replace individual physician's judgment with respect to particular patients or special clinical situations. Guidelines should be followed with assistance of family physician/nurse practitioner or ObGyn and other healthcare professionals as required. Given the rarity of gestational trophoblastic neoplasia (GTN), important goals of gestational neoplastic disease include:

- To guide referring physicians for accurate diagnosis of persistent/malignant gestational trophoblastic neoplasia to avoid inappropriate referrals or delays in referral.
- To possibly identify, at a curable stage, recurrent disease which may be amenable to salvage therapy.

Gestational trophoblastic disease (GTD) encompasses both malignant and benign entities. Complete and partial hydatidiform moles are considered premalignant given their potential for persistence and invasion. Malignant forms are defined as gestational trophoblastic neoplasia (GTN) can be preceded by a molar or non-molar pregnancy and includes several diagnoses: invasive moles, choriocarcinomas, placental site trophoblastic tumours, and epithelioid trophoblastic tumours.(1)

- The incidence of GTD is generally reported to be 1 in 1000 pregnancies.
- The risk of invasive mole is 15% to 20% after a complete hydatidiform moles and 0.5% to 1% after a partial hydatidiform moles.
- For low-risk GTN, cure rate is nearly 100%.

### Recommended Monitoring Post-Evacuation Molar Pregnancy

- Measure serum human chorionic gonadotropin (hCG) levels in women of reproductive age presenting with abnormal uterine bleeding, including bleeding >6 weeks after pregnancy (i.e.,after term or preterm birth, ectopic pregnancy, termination of pregnancy, evacuation of a nonviable pregnancy, or spontaneous abortion) or with evidence of metastatic disease in order to promptly diagnose and manage gestational trophoblastic disease.(1)
- After evacuation of a molar pregnancy, begin weekly hCG monitoring 2 weeks post-procedure and continue until levels remain undetectable for 3 consecutive weeks.
- For complete hydatidiform mole, continue to monitor hCG monthly for 6 months. For partial hydatidiform mole, measure hCG 1 month after the first undetectable result in order to confirm resolution.(1)
- Women undergoing follow-up after molar pregnancy should receive reliable contraception (OCP or Depo-Provera) throughout the entire duration of follow-up.(1)

### Diagnostic Criteria for Persistent GTN (Malignant)

During post-molar follow-up, persistent disease is diagnosed only when any one of the following criteria are met:(1)

- A rising serum hCG level, defined as a >10% increase compared with the previous level for 2 consecutive weeks (3 levels measured on days 1, 8, and 15).

- A plateau in serum hCG levels, defined as a <10% change/plateau compared with the previous level for 3 consecutive weeks (4 levels measured on days 1, 8, 15, and 22).
- A histologic diagnosis of choriocarcinoma (note: rebiopsy is not recommended).
- Evidence of metastatic disease.
- A serum hCG level ≥20 000 mIU/mL more than 4 weeks post-evacuation
- NOTE: The referral criterion of "elevated hCG 6 months after evacuation" is no longer listed. It appears to be safe to follow hCG levels beyond 6 months as long as the hCG level is declining.

## Recommendations for Patients Diagnosed with Persistent GTN (Malignant)

- Women diagnosed with gestational trophoblastic neoplasia should be promptly referred to a specialist in gynaecologic oncology for staging, risk scoring, and treatment.[1]

## Follow-Up for Patients Post Treatment for Persistent GTN (Malignant)

- Patients who were treated with single agent chemotherapy to be followed by gynecologic oncology until normal monthly beta HCG x 6 months.
- Patients who were treated with multi agent chemotherapy to be followed by gynecologic oncology until normal monthly beta HCG x 24 months.
- Pregnancy should be avoided until β-hCG levels have been normal for a minimum of six months up to one year (depending on risk score) following chemotherapy for gestational trophoblastic neoplasia; however, among patients who do conceive within 6-12 months of treatment, a favorable outcome is likely.[2]
- Women undergoing follow-up after all GTD/GTN should receive reliable contraception (OCP or Depo-Provera) throughout the entire duration of follow-up.
- For subsequent pregnancy in women with previous gestational trophoblastic neoplasia or recurrent molar pregnancy, follow-up in a subsequent pregnancy should include early ultrasound scan, close examination of the placenta with post-delivery hCG, and histologic examination of any nonviable pregnancy.[1]

## References

(1) SOGC
SOGC Guideline No. 408: Management of Gestational Trophoblastic Diseases, J Obstet Gynaecol Can 2021;43(1):91−105

(2) Alberta Health Services Clinical Practice Guideline Gyne-008 Gestational trophoblastic neoplasia June, 2012.
https://www.albertahealthservices.ca/assets/info/hp/cancer/if-hp-cancer-guide-gyne008-gestational-trophoblastic-neoplasia.pdf

BC Cancer Agency
http://www.bccancer.bc.ca/health-professionals/clinical-resources/cancer-management-guidelines/gynecology/gestational-trophoblastic-neoplasia#Diagnosis-Gestational-Trophoblastic-Neoplasia

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