



Management of gestational trophoblastic disease

This statement has been developed by the
2 A list of Women's Health Committee Members
be found in [Appendix B](#).

Declarations of interest have been received from all principal authors and Women's Health Committee.

Disclaimer This information is intended to provide general advice to practitioners. This information should not be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of any patient. This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The document has been prepared having regard to general circumstances.

First endorsed by RANZCOG: November 2013
Current: March 2017
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Objectives: To provide advice on the management of gestational trophoblastic disease.

Target audience: All health practitioners providing maternity care, and patients.

Values: The evidence was reviewed by the Women's Health Committee (RANZCOG), and applied to local factors relating to Australia and New Zealand.

Validation: This statement was compared with RCOG¹ and ACOG² guidelines on this topic.

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4.

PSTT is increasingly thought of as a separate entity, as its behaviour differs from other GTDs. PSTT should be considered in cases of relapse. Treatment for PSTT is usually hysterectomy.

4.1.5 Epithelioid Trophoblast Tumour (ETT)

Epithelioid Tropho

4.3 How should GTD be managed?

Suspected molar pregnancy

Early pregnancy

- Ultrasound features
- PV bleeding
- Hyperemesis
- Abnormally high hCG levels

Mid-trimester

- Large for dates
- Pre-eclampsia, hyperthyroidism, pulmonary

Counselling

Inform both patient and GP:

- Pregnancy is now a reasonable option
- Fertility rate not affected
- 1:70 risk of repeat molar pregnancy, therefore recommend early ultrasound, and hCG level 6 weeks following the completion of any future pregnancies (**regardless of outcome of that pregnancy**)

5.4 Follow-up

5.5 Technical information

7. References

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8. Further reading

1. Berkowitz RS, Goldstein DP. Current advances in the management of gestational trophoblastic disease. *Gynecol Oncol* (2013); Jan;128(1):3-5.
2. Kerkmeijer L *et al*. Guidelines following hydatidiform mole: a reappraisal. *Aust NZ J Obstet Gynecol*. 2006 Apr;46(2):112-8.
3. Kohorn EI. Negotiating a staging and risk factor scoring system for gestational trophoblastic neoplasia. A progress report. *J Reprod Med*. 2002;47(6):445.
4. International Federation of Obstetrics and Gynecology Oncology Committee. FIGO staging for gestational trophoblastic neoplasia 2000. *Int J Gynecol Obstet* 2002;77:285-7.

Appendices

Appendix A GTD Follow-up form (Source: Western Australian Gynaecologic Cancer Service)

GESTATIONAL TROPHOBLASTIC DISEASE	Med Rec No _____
	Surname _____

Following a diagnosis of gestational trophoblastic disease (GTD), the patient is advised to follow the following guidelines:

1. The patient is advised to have a blood test for hCG levels at the following times:

- At the time of diagnosis.
- At the time of the first follow-up appointment (usually 2-4 weeks after diagnosis).
- At the time of the second follow-up appointment (usually 4-6 weeks after diagnosis).
- At the time of the third follow-up appointment (usually 8-12 weeks after diagnosis).
- At the time of the fourth follow-up appointment (usually 12-16 weeks after diagnosis).
- At the time of the fifth follow-up appointment (usually 18-24 weeks after diagnosis).
- At the time of the sixth follow-up appointment (usually 24-36 weeks after diagnosis).
- At the time of the seventh follow-up appointment (usually 36-48 weeks after diagnosis).
- At the time of the eighth follow-up appointment (usually 48-60 weeks after diagnosis).
- At the time of the ninth follow-up appointment (usually 60-72 weeks after diagnosis).
- At the time of the tenth follow-up appointment (usually 72-84 weeks after diagnosis).
- At the time of the eleventh follow-up appointment (usually 84-96 weeks after diagnosis).
- At the time of the twelfth follow-up appointment (usually 96-108 weeks after diagnosis).
- At the time of the thirteenth follow-up appointment (usually 108-120 weeks after diagnosis).
- At the time of the fourteenth follow-up appointment (usually 120-132 weeks after diagnosis).
- At the time of the fifteenth follow-up appointment (usually 132-144 weeks after diagnosis).
- At the time of the sixteenth follow-up appointment (usually 144-156 weeks after diagnosis).
- At the time of the seventeenth follow-up appointment (usually 156-168 weeks after diagnosis).
- At the time of the eighteenth follow-up appointment (usually 168-180 weeks after diagnosis).
- At the time of the nineteenth follow-up appointment (usually 180-192 weeks after diagnosis).
- At the time of the twentieth follow-up appointment (usually 192-204 weeks after diagnosis).
- At the time of the twenty-first follow-up appointment (usually 204-216 weeks after diagnosis).
- At the time of the twenty-second follow-up appointment (usually 216-228 weeks after diagnosis).
- At the time of the twenty-third follow-up appointment (usually 228-240 weeks after diagnosis).
- At the time of the twenty-fourth follow-up appointment (usually 240-252 weeks after diagnosis).
- At the time of the twenty-fifth follow-up appointment (usually 252-264 weeks after diagnosis).
- At the time of the twenty-sixth follow-up appointment (usually 264-276 weeks after diagnosis).
- At the time of the twenty-seventh follow-up appointment (usually 276-288 weeks after diagnosis).
- At the time of the twenty-eighth follow-up appointment (usually 288-300 weeks after diagnosis).
- At the time of the twenty-ninth follow-up appointment (usually 300-312 weeks after diagnosis).
- At the time of the thirtieth follow-up appointment (usually 312-324 weeks after diagnosis).
- At the time of the thirty-first follow-up appointment (usually 324-336 weeks after diagnosis).
- At the time of the thirty-second follow-up appointment (usually 336-348 weeks after diagnosis).
- At the time of the thirty-third follow-up appointment (usually 348-360 weeks after diagnosis).
- At the time of the thirty-fourth follow-up appointment (usually 360-372 weeks after diagnosis).
- At the time of the thirty-fifth follow-up appointment (usually 372-384 weeks after diagnosis).
- At the time of the thirty-sixth follow-up appointment (usually 384-396 weeks after diagnosis).
- At the time of the thirty-seventh follow-up appointment (usually 396-408 weeks after diagnosis).
- At the time of the thirty-eighth follow-up appointment (usually 408-420 weeks after diagnosis).
- At the time of the thirty-ninth follow-up appointment (usually 420-432 weeks after diagnosis).
- At the time of the fortieth follow-up appointment (usually 432-444 weeks after diagnosis).
- At the time of the forty-first follow-up appointment (usually 444-456 weeks after diagnosis).
- At the time of the forty-second follow-up appointment (usually 456-468 weeks after diagnosis).
- At the time of the forty-third follow-up appointment (usually 468-480 weeks after diagnosis).
- At the time of the forty-fourth follow-up appointment (usually 480-492 weeks after diagnosis).
- At the time of the forty-fifth follow-up appointment (usually 492-504 weeks after diagnosis).
- At the time of the forty-sixth follow-up appointment (usually 504-516 weeks after diagnosis).
- At the time of the forty-seventh follow-up appointment (usually 516-528 weeks after diagnosis).
- At the time of the forty-eighth follow-up appointment (usually 528-540 weeks after diagnosis).
- At the time of the forty-ninth follow-up appointment (usually 540-552 weeks after diagnosis).
- At the time of the fiftieth follow-up appointment (usually 552-564 weeks after diagnosis).
- At the time of the fifty-first follow-up appointment (usually 564-576 weeks after diagnosis).
- At the time of the fifty-second follow-up appointment (usually 576-588 weeks after diagnosis).
- At the time of the fifty-third follow-up appointment (usually 588-600 weeks after diagnosis).
- At the time of the fifty-fourth follow-up appointment (usually 600-612 weeks after diagnosis).
- At the time of the fifty-fifth follow-up appointment (usually 612-624 weeks after diagnosis).
- At the time of the fifty-sixth follow-up appointment (usually 624-636 weeks after diagnosis).
- At the time of the fifty-seventh follow-up appointment (usually 636-648 weeks after diagnosis).
- At the time of the fifty-eighth follow-up appointment (usually 648-660 weeks after diagnosis).
- At the time of the fifty-ninth follow-up appointment (usually 660-672 weeks after diagnosis).
- At the time of the sixtieth follow-up appointment (usually 672-684 weeks after diagnosis).
- At the time of the sixty-first follow-up appointment (usually 684-696 weeks after diagnosis).
- At the time of the sixty-second follow-up appointment (usually 696-708 weeks after diagnosis).
- At the time of the sixty-third follow-up appointment (usually 708-720 weeks after diagnosis).
- At the time of the sixty-fourth follow-up appointment (usually 720-732 weeks after diagnosis).
- At the time of the sixty-fifth follow-up appointment (usually 732-744 weeks after diagnosis).
- At the time of the sixty-sixth follow-up appointment (usually 744-756 weeks after diagnosis).
- At the time of the sixty-seventh follow-up appointment (usually 756-768 weeks after diagnosis).
- At the time of the sixty-eighth follow-up appointment (usually 768-780 weeks after diagnosis).
- At the time of the sixty-ninth follow-up appointment (usually 780-792 weeks after diagnosis).
- At the time of the seventieth follow-up appointment (usually 792-804 weeks after diagnosis).
- At the time of the seventy-first follow-up appointment (usually 804-816 weeks after diagnosis).
- At the time of the seventy-second follow-up appointment (usually 816-828 weeks after diagnosis).
- At the time of the seventy-third follow-up appointment (usually 828-840 weeks after diagnosis).
- At the time of the seventy-fourth follow-up appointment (usually 840-852 weeks after diagnosis).
- At the time of the seventy-fifth follow-up appointment (usually 852-864 weeks after diagnosis).
- At the time of the seventy-sixth follow-up appointment (usually 864-876 weeks after diagnosis).
- At the time of the seventy-seventh follow-up appointment (usually 876-888 weeks after diagnosis).
- At the time of the seventy-eighth follow-up appointment (usually 888-900 weeks after diagnosis).
- At the time of the seventy-ninth follow-up appointment (usually 900-912 weeks after diagnosis).
- At the time of the eightieth follow-up appointment (usually 912-924 weeks after diagnosis).
- At the time of the eighty-first follow-up appointment (usually 924-936 weeks after diagnosis).
- At the time of the eighty-second follow-up appointment (usually 936-948 weeks after diagnosis).
- At the time of the eighty-third follow-up appointment (usually 948-960 weeks after diagnosis).
- At the time of the eighty-fourth follow-up appointment (usually 960-972 weeks after diagnosis).
- At the time of the eighty-fifth follow-up appointment (usually 972-984 weeks after diagnosis).
- At the time of the eighty-sixth follow-up appointment (usually 984-996 weeks after diagnosis).
- At the time of the eighty-seventh follow-up appointment (usually 996-1008 weeks after diagnosis).
- At the time of the eighty-eighth follow-up appointment (usually 1008-1020 weeks after diagnosis).
- At the time of the eighty-ninth follow-up appointment (usually 1020-1032 weeks after diagnosis).
- At the time of the ninetieth follow-up appointment (usually 1032-1044 weeks after diagnosis).
- At the time of the ninety-first follow-up appointment (usually 1044-1056 weeks after diagnosis).
- At the time of the ninety-second follow-up appointment (usually 1056-1068 weeks after diagnosis).
- At the time of the ninety-third follow-up appointment (usually 1068-1080 weeks after diagnosis).
- At the time of the ninety-fourth follow-up appointment (usually 1080-1092 weeks after diagnosis).
- At the time of the ninety-fifth follow-up appointment (usually 1092-1104 weeks after diagnosis).
- At the time of the ninety-sixth follow-up appointment (usually 1104-1116 weeks after diagnosis).
- At the time of the ninety-seventh follow-up appointment (usually 1116-1128 weeks after diagnosis).
- At the time of the ninety-eighth follow-up appointment (usually 1128-1140 weeks after diagnosis).
- At the time of the ninety-ninth follow-up appointment (usually 1140-1152 weeks after diagnosis).
- At the time of the one hundredth follow-up appointment (usually 1152-1164 weeks after diagnosis).

The patient is advised to return to the clinic for a blood test at the times listed above. If the patient has any questions or concerns, they should contact their doctor or the clinic.

Appendix B How should GTN be managed?

GTN

Persistent GTD
PSTT, ETT
Choriocarcinoma

Metastatic workup

Request MDT review

Organise FBE, UE, LFT, Group and hold,
quantitative serum hCG, TFT

Organise metastatic screen (CT head, thorax,
abdomen and pelvis. (Additional MRI head if
choriocarcinoma, pulmonary metastases or
neurological symptoms)

WHO Risk score

Age
Antecedent pregnancy
Interval months from index pregnancy
Pre-treatment hCG level
Largest tumour size (cm)
Site of metastases
Number of metastases
Previous failed chemotherapy

WHO Score 7 or more

High risk protocol

WHO Score <7

Low risk protocol

High risk protocol

EMACO – example protocol

Low risk protocol

Methotrexate/Folinic acid OR Actinomycin D

Example protocol MTX

Methotrexate 1mg/kg IMI on Day 1,3,5,7 and
Folinic Acid 0.1mg/kg IMI (or 15mg oral) on Day
2,4,6,8 repeated every 2 weeks

Example protocol Actinomycin D

Actinomycin 1.25mg/m² (max 2mg) IV every 2

hCG normalises

Chemotherapy until normal hCG level, then further
three cycles

Monthly hCG for 12 months, advise not to
conceive during that time

Inform both patient and GP:

Patient cleared to get pregnant
Fertility rate not affected
1:70 risk of repeat molar pregnancy, therefore
recommend early ultrasound, and hCG level
6 weeks following the completion of any future
pregnancies (**regardless of outcome of that
pregnancy**)

Appendix C Women's Health Committee Membership

Name	Position on Committee
Professor Yee Leung	Chair
Dr Joseph Sgroi	Deputy Chair, Gynaecology
Associate Professor Janet Vaughan	Deputy Chair, Obstetrics
Professor Susan Walker	Member
Associate Professor Ian Pettigrew	Member
Dr Tal Jacobson	Member
Dr Ian Page	Member
Dr John Regan	Member
Dr Craig Skidmore	Member
Dr Lisa Hui	Member
Dr Bernadette White	Member
Dr Scott White	Member
Associate Professor Kirsten Black	Member
Dr Greg Fox	College Medical Officer
Dr Marilyn Clarke	Chair of the A&TSI WHC
Dr Martin Byrne	GPOAC Representative
Ms Catherine Whitby	Community Representative
Ms Sherryn Elworthy	Midwifery Representative
Dr Amelia Ryan	Trainee Representative

Appendix D Overview of the development and review process for this statement

i. Steps in developing and updating this statement

This statement was developed during 2013 and most recently reviewed in March 2017. The principle authors carried out the following steps in developing this statement:

Declarations of interest were received from all principal authors and Women's Health Committee members prior to reviewing this statement.

Structured clinical questions were developed and agreed upon.

A literature search to answer the clinical questions was undertaken and a draft was

appropriate) based on the body of evidence and clinical expertise of Women's Health Committee.

ii. Declaration of interest process and management

Declaring interests is essential in order to prevent any potential conflict between the private interests of members, and their duties as part of the Women's Health Committee.

A declaration of interest form specific to guidelines and statements was developed by RANZCOG and approved by the RANZCOG Board in September 2012. The Women's Health Committee members were required to declare their relevant interests in writing on this form prior to participating in the review of this statement.

Members were required to update their information as soon as they become aware of any changes to their interests and there was also a standing agenda item at each meeting where declarations of interest were called for and recorded as part of the meeting minutes.

There were no significant real or perceived conflicts of interest that required management during the process of updating this statement.

iii. Grading of recommendations

Each recommendation in this College statement is given an overall grade as per the table below, based on the National Health and Medical Research Council (NHMRC) Levels of Evidence and Grades of Recommendations for Developers of Guidelines.¹⁸ Where no robust evidence was available but there was sufficient consensus within the writing group, consensus-based recommendations were developed and are identifiable as such. Consensus-based recommendations were agreed to by the entire committee. Good Practice Notes are highlighted throughout and provide practical guidance to facilitate implementation. These were also developed through consensus.

Recommendation category		Description
Evidence-based	A	Body of evidence can be trusted to guide practice
	B	Body of evidence can be trusted to guide practice in most situations

Good Practice Note	Practical advice and information based on clinical opinion and expertise
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Appendix E Full Disclaimer

This information is intended to provide general advice to practitioners, and should not be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of any patient.

This information has been prepared having regard to general circumstances. It is the responsibility of each practitioner to have regard to the particular circumstances of each case. Clinical management should be responsive to the needs of the individual patient and the particular circumstances of each case.

This information has been prepared having regard to the information available at the time of its preparation, and each practitioner should have regard to relevant information, research or material which may have been published or become available subsequently.

Whilst the College endeavours to ensure that information is accurate and current at the time of preparation, it takes no responsibility for matters arising from changed circumstances or information or material that may have become subsequently available.