Stage 1 'very-low-risk' GTN:

Is it safe to wait & can patients self-cure?

Ward D, Ayres C, Kember M, Ho J & Allanson, E

Affiliation: Western Australian Trophoblastic Centre

Email: watc@health.wa.gov.au

Background:

- Post-molar GTN is highly curable when managed in expert centres and treated adequately
- Treatment decisions are guided by FIGO staging and WHO prognostic scoring
- Some patients who meet GTN criteria, and treatment is unexpectantly delayed, may have spontaneous hCG decline
- The safety of no treatment in select patients with very-low-risk disease remains uncertain

Objective:

- To describe spontaneous hCG decline and subsequent outcomes in patients with very-low-risk post-molar GTN

Methods:

- Retrospective cohort, within WATC, a state-wide centralised GTD centre in Western Australia
- Between June 2023 - June 2026, WATC had 265 patients with GTD, and 35 patients with GTN
- Ten patients were identified who met criteria for post-molar GTN, FIGO Stage 1 'very-low-risk' WHO score 0-2, who had not yet started treatment, but had a spontaneous decline in hCGs during close monitoring

Results tables:

Table 1. Baseline characteristics & management of low-risk GTN with spontaneous hCG decline (n = 10)

Characteristic	Result, median (range) or n (%)
Age in years	31 (range 19–54)
Parity	6 parous, 4 nulliparous
Residence	6 metro, 4 rural/remote
Distance from residence to WATC	53 km (range 19–1552)
Initial management	9 D&C, 1 hysterectomy
Repeat D&C (pre-referral)	1 patient
Histopathology - Complete Hydatidiform Mole	10 (100%)

Table 2. Biochemical & imaging characteristics of low-risk GTN with spontaneous hCG decline (n = 10)

Serum hCG, IU/L	Median (range) or n (%)
At GTD diagnosis	415205 (86700–2730000)
When GTN diagnostic criteria met	695 (11–11919)
Highest hCG after GTN diagnosis	839 (13–19585)
Initial investigations & findings	
Time (in days) from GTN diagnostic criteria met to imaging	7 (0–15)
Chest X-ray performed	9 (90%)
CTchest/abdo/pelvis performed	6 (60%)
Pelvic ultrasound performed	8 (80%)
Endometrial thickness, in mm	10 (2-47)
FIGO Stage 1, WHO score 0	5 (50%)
WHO score 1	4 (40%)
WHO score 2	1 (10%)

Results:

10/10 post-molar GTN
FIGO Stage 1 WHO score 0–2
Antecedent pregnancy all CHM, < 4 months

7 days (range 0 - 15) for complete imaging

9/10 resided > 19 km (range 19 - 1552) from WATC

Cases of interest:

- 1 CHM, initial management with hysterectomy. Rising hCG at 6 weeks post-op. Patient declined chemo. hCG spontaneously fell 3 weeks later (on 4th reading). Monitored for 12 months
- 1 CHM, GTN with hCG plateau. Had spontaneous decline the day prior to planned repeat D&C. Two weeks later GTN criteria re-met with rising hCG. Then had spontaneous decline in hCG prior to planned chemo. Monitoring for 6 months
- 4 CHM had very heavy PV bleeding, 1 requiring blood transfusion, all resulted in decline in hCG

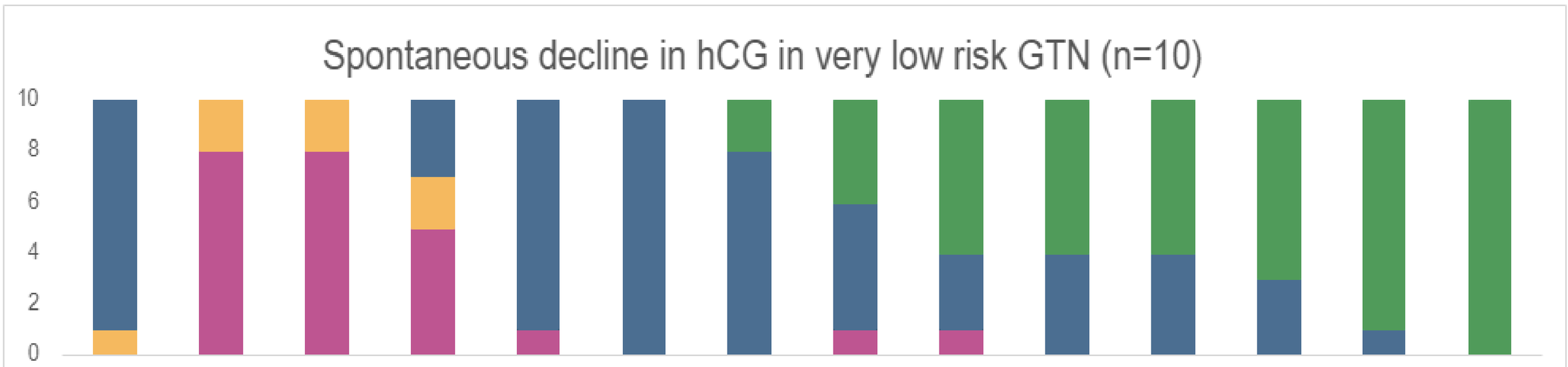
4/10 decline in hCG at 4th reading, one week after GTN

5/10 decline in hCG at 5th reading, two weeks after GTN

10/10 spontaneous decline in hCG by 6th reading

7/10 completed & 3/10 undergoing 6 - 12 months of hCG monitoring

3/10 healthy live births after completion of monitoring



Discussion:

- Spontaneous hCG decline was observed in all ten patients in this selected cohort, most within the 4th or 5th hCG reading (day 21-28). These observations raise the possibility that a subset of low risk post-molar GTN may undergo spontaneous biochemical regression. However, the small cohort and observational design does not establish the safety of delaying or avoiding treatment

Conclusion:

- In this very small cohort of highly selected very low risk FIGO Stage 1, WHO score 0-2 post-molar GTN, spontaneous hCG decline was observed. These findings suggest a natural history of very low risk GTN and the potential of avoiding treatment in select patients with close careful monitoring by a centralized service

The North Metropolitan Health Service (NMHS) acknowledges the Whadjuk people of the Noongar nation as the traditional owners and custodians of the land on which we work.