Screening for gestational diabetes during COVID-19 – Top End, Northern Territory

Universal diabetes screening during pregnancy is standard practice in Australia, enabling identification and treatment of gestational diabetes (GDM), which improves pregnancy outcomes. Current national advice provided by the Australasian Diabetes in Pregnancy Society (ADIPS) and the Australian Diabetes Society (ADS) is that health services should determine the local contagion risk of COVID-19 (based on local public health data) and capacity of services/pathology centres to support social/physical distancing. Services may consider themselves as 'green' (low risk); 'amber' (moderate risk) or 'red' (high risk) and should adjust GDM screening practices accordingly.

In the NT's Top End, it is currently recommended that clinicians continue to adhere to standard practice. We can confirm that in the Top End, Western Diagnostic Pathology have clear plans in place to manage OGTT processes during COVID-19 and Australian Clinical Labs follow guidance of associated clinics, thus physical distancing is possible during an OGTT in both of these services. Standard screening practice (as per the *Women's Business Manual*) is below.

Early screening for women at high-risk of diabetes in pregnancy: Women at high-risk of diabetes in pregnancy should undertake screening ideally before 13 weeks pregnancy using the fasting 75g, 2-hour OGTT. If the OGTT cannot be done, random blood glucose and HbA1c may be used. For women with random blood glucose ≥ 5.1 mmol/L or HbA1c ≥ 5.7%, an OGTT should be performed. Women who have results below these thresholds should be screened again between 24-28 weeks of pregnancy. As per current recommendations, women with a HbA1c ≥ 6.5% have newly-diagnosed likely type 2 diabetes and do not need an OGTT.

Risk factors for diabetes in pregnancy include:

- Ethnicity: Aboriginal or Torres Strait Islander, Asian, Indian, Pacific Islander, Maori, Middle Eastern, non-white African
- Past history of GDM or high BGL
- Family history of diabetes
- Previous large for gestational age baby
- Obesity: pre-pregnancy BMI more than 30
- Age: over 35 years
- Polycystic ovary syndrome
- Previous adverse pregnancy outcome
- Medications include antipsychotics, corticosteroids.

Universal Screening at 24-28 weeks pregnancy: all women have the OGTT at 24-28 weeks of pregnancy. A diagnosis of GDM is given if any one result is:

- 0 hour: ≥ 5.1 mmol/L
- 1 hour: ≥ 10 mmol/L
- 2 hour: ≥ 8.5 mmol/L.

Postpartum screening: women with GDM should have an OGTT at 6-8 weeks postpartum or HbA1c at least 4 months postpartum if OGTT is not possible.

The Top End may be considered a 'green' site (according to national guidelines) which supports operations as usual due to capacity to social/physical distance, small number of COVID-19 cases and no community transmission.

Should risk of contagion increase or if pathology/health services cannot support social distancing, then screening may be adjusted. For example, national recommendations for 'amber'[1] sites are:

- *Early screening* for women at high risk using HbA1c and random blood glucose screening; with HbA1c ≥ 5.9% and random blood glucose ≥ 9.0 mmol/L considered diagnostic of GDM (no confirmatory OGTT needed).
- *Universal screening* at 24-28 weeks with three possible screening strategies:
  - OGTT with usual criteria or
  - Alternative screening with initial fasting blood glucose (FBG). FBG ≥ 5.1 mmol/L is diagnostic of GDM. Women with FBG 4.7- 5.0 should undergo an OGTT; or
  - Immediate commencement of home blood glucose monitoring in women with GDM in a previous pregnancy.
- *Postpartum screening*: usual practice or a delayed OGTT (6 months postpartum).

[1] Please note that national recommendations differ from those outlined in the *Women's Business Manual.*