Gestational Diabetes Management (GDM)– After Delivery

During the postpartum period in hospital, there will be closer monitoring of women who are more likely to have ongoing glucose intolerance in the early postpartum period:

- Women requiring over 150 units insulin per day during pregnancy
- Women thought to be more likely to have evolving type 1 diabetes
- Women thought to have previously undiagnosed type 2 diabetes

These women will be assessed and advised regarding the following:

- Whether to continue home blood glucose monitoring post-discharge and if so the appropriate frequency
- Whether ongoing glucose lowering medications may be required (insulin if breastfeeding, insulin or oral agents as appropriate if not breastfeeding) if ongoing diabetes
- Early review, within 4 weeks, at the postnatal diabetes clinic on a Monday morning, or with endocrinologist if private patient.

Follow up of private patients should be made according to their own endocrinologists’ requests.

Information for GPs

Long term studies have shown that approximately 50% of women who have had Gestational Diabetes Mellitus (GDM) will develop diabetes or Impaired Glucose Tolerance (IGT) within 10-15 years. Therefore post-natal follow up is recommended for all women who have had GDM.

Prior to discharge all women who have had GDM will be:

- given a postnatal information sheet, GTT diet preparation sheet, and an appointment for review at the RPAH postnatal diabetes clinic on a Monday morning at the Diabetes Centre in about 3 months time.
- advised to continue on a ‘healthy lifestyle diet’ (postnatal clinic ph: 9515 5888)

Please organize the following tests for your patient 1-2 weeks before the postnatal appointment:

| 2 hour 75g GTT (BSLs at 0 hr, 1hr, 2hrs), lipids, TFT + FBC |

Please give the patient a copy of the results to bring to the appointment, or request a copy to be sent to Dr Glynis Ross at the RPAH Diabetes Centre

Please remember the women should follow the diet recommendations for the 3 days before the GTT. During the test they should remain seated, and not breastfeed in the 2 hour test period. It is best if they can arrange to have assistance with the baby. Refer to the GTT Information section.

At the postnatal clinic visit the following issues will be discussed, usually in a small group setting:

- results of the GTT
- general background information about diabetes – current prevalence, reasons and methods for trying to diagnose diabetes early, need for good longterm diabetes control to minimize complication risk, hyperglycaemic symptoms
- advice regarding their increased risk of developing diabetes in the future
- advice regarding current diet and exercise recommendations to delay / avoid development of future diabetes
- recommendations regarding method and frequency of future testing for diabetes
• advice regarding future pregnancies in view of high likelihood of recurrence of gestational diabetes, and importance of pre-pregnancy planning if already impaired glucose tolerance or diabetes prior to pregnancy
• importance of healthy lifestyle (diet, exercise, weight control) for woman and whole family.
• need for ongoing periodic review with their general practitioner

They will also be given an information brochure covering these issues to take home.

GDM: Guidelines for GPs on Post-Natal Follow Up

General Practitioners play a pivotal role in follow-up of women who have had gestational diabetes.

From 1 July 2011 reminders regarding follow up will be sent by the NDSS to women who had GDM and their GPs if the women have agreed to be on the National Gestational Diabetes Register which was established by the NDSS and the Australian Diabetes Society, and launched in November 2010 by the Federal Government.

Our recommendations for following up all women who have had GDM are:

1. **Lifestyle:**
   - Revise ‘healthy lifestyle’ diabetic diet recommendations – low saturated fat, more lower GI (glycaemic index) carbohydrate choices, eat regularly, care with meal sizes
   - Encourage regular exercise (eg 3-4 hours’ brisk walking per week – longterm!) – to reduce overall risk of type 2 diabetes by 1/3 and slow progression of IGT to diabetes
   - Aim for ‘healthy weight’ range; obesity and weight gain following a GDM pregnancy are associated with 2 x increased risk of developing abnormal glucose tolerance; weight loss approximately halves this risk
   - Assess other vascular risk factors (smoking, hypertension, dyslipidaemia)

2. **2-hour 75g OGTT at 2-3 months postpartum to assess current glucose tolerance status:**
   - **Persisting diabetes**
     - Gradually educate about ‘permanent’ diabetes
     - Recommmend home blood glucose monitoring with a meter (frequency depends on degree of control, usually 2x per week to 2x per day)
     - Assess need for glucose lowering medications
     - Baseline complications assessment within 12 months
     - Plan regular review
   - **Impaired glucose tolerance (IGT)**
     - Repeat 75g OGTT on annual basis (unless diabetes develops)
   - **Normal glucose tolerance**
     - Repeat 75g OGTT every 2-3 years (only way to detect IGT; detects diabetes earlier than random BGL or fasting BGL). A1c is not sensitive enough to be used in this setting (and also does NOT get a Medicare rebate if requested to diagnose diabetes.

3. **Discuss possible symptoms of hyperglycaemia**
   Polyuria, thirst, tiredness, thrush, UTIs, skin infections, blurred vision – advise to seek medical attention promptly if develop some of these symptoms
4. Suggest immediate family members be screened for diabetes (parents, siblings)

5. Future pregnancies

- Preferably plan (discuss contraception)
  - If already diabetes - enables pre-pregnancy assessment (diabetic control, complications screen, commence folic acid 5mg daily, review hypoglycaemia and sick day management)- refer for specialist care
  - If IGT – repeat OGTT pre-pregnancy (unless latest one done in preceding 9-12 months) to check it has not progressed to diabetes; revise diet recommendations. Once pregnant manage as GDM (further GTT in pregnancy not necessary)
  - If normal glucose tolerance - repeat GTT pre-pregnancy unless latest one done in preceding 9-12 months to check it has not changed; advise ‘diabetic’ diet – may delay/prevent GDM recurrence

- GDM recurs in at least 70% subsequent pregnancies. Women who have previously had gestational diabetes need to have a GTT at the following times in the next pregnancy:
  - 75g OGTT at 16-20 weeks gestation
  - If early OGTT is negative, repeat 75g OGTT at 26-28 weeks, or earlier if any clinical indicators suggest possible diabetes (refer to the antenatal screening protocol)

Please note: 75g OGTT must be done in a standardised way:
- Ensure adequate carbohydrate in the 3 days preceding the test; do OGTT in the morning following an overnight fast of 10-16 hours; Patient should remain at rest throughout the test
- Venous blood (not meter readings) should be taken at baseline, 1 hour and 2 hours after glucose load