

# DIABETES IN PREGNANCY

## Screening

### 1. FOR PRE-EXISTING DIABETES IN THOSE AT RISK

i.e. h/o gestational diabetes, BMI > 25, history of IUGR, stillbirth, congenital abnormality, impaired glucose tolerance (IGT) or impaired fasting glucose (IFG) and Aboriginal and Torres Strait Islander peoples

- **random venous blood glucose** at 1st antenatal check:
  - If > **5.5mmol/L**, do a 75g fasting oral glucose tolerance test (OGTT) to exclude DM, IGT or IFG.
  - If > **11.1mmol/L**, do another random venous blood glucose. If again > 11.1 mmol/L, diagnose DM.

### 2. FOR GESTATIONAL DIABETES IN ALL WOMEN

See 'Screening for Gestational Diabetes' flow-chart overleaf.

## Case Definition

### For those AT RISK or with FOETAL MACROSOMIA:

Consider repeat screening for gestational diabetes (as above) as clinically indicated.

### PRE-EXISTING DIABETES:

Diabetes present in a woman who becomes pregnant *or* has diabetes diagnosed **within the first 12 weeks of pregnancy**.

### GESTATIONAL DIABETES:

Diabetes with **onset and first recognition in pregnancy**. Diagnosed by 75g OGTT with 2 hour post glucose level > 8 *and / or* fasting level > 5.5 mmol/L.

## Principles of Management

- Untreated diabetes in pregnancy is associated with **increased perinatal morbidity and mortality**.
- **Diet** is the mainstay of gestational DM management and is often sufficient.

### MEDICATIONS IN PREGNANCY:

- **Category C and D Medicines** are **ACE-inhibitors, ARBs, calcium channel blockers, beta blockers, diuretics, warfarin, aspirin and sulfonylureas**.
- **Review** all of patient's medications. STOP all those in category C and D and weigh up the risk and benefits of medicines in other categories.
- **Check** relevant Kimberley Chronic Disease Protocol for recommended replacement medicine/course of action in pregnancy.

### GLUCOSE MONITORING:

- Daily home blood sugar level (BSL) monitoring is best.
- On rising and 1 hour after breakfast.
- If home monitoring not possible, monitor in the health clinic with weekly fasting and 1 - 2 hour postprandial BSL.
- In pre-existing DM, check HbA1c every 8 weeks.

### GOALS OF MANAGEMENT:

- Fasting Blood glucose < 5.5 mmol/L.
- 1 hr post prandial glucose < 8mmol/L and 2 hr < 7mmol/L.
- HbA1c < 7%.

### ANTENATAL CARE:

- Every 2 weeks until 28 weeks.
- Every week after 28 weeks.
- Women from remote areas, transfer to obstetric centre at 36 weeks.

## Therapeutic Protocols

**Healthy diet essential.** Refer for dietary advice immediately.

### PRE-EXISTING DIABETES:

#### PRECONCEPTION COUNSELLING:

- Aim for HbA1c < 6% before conception.
- Commence **folic acid** 5 mg daily from 1 month prior to conception.
- Pregnancy accelerates diabetic retinopathy. Conduct retinal screening if a normal screen has not been documented in the last 12 months.
- Take **folic acid** 5 mg daily until 14 weeks gestation.
- If already on medication for diabetes: continue **metformin**, continue **insulin**, cease all other hypoglycemic medications.
- If blood glucose goals are exceeded > /2 times over a 1 - 2 week interval and:
  - (1) not on any medications: follow gestational protocol below for gestational diabetes
  - (2) on metformin alone, start insulin (refer to [DIABETES TYPE II - Insulin 'How to start'](#)).

### GESTATIONAL DIABETES:

If blood glucose goals are exceeded  $\geq 2$  times over a 1 - 2 week interval, start medication.

**1st line: Metformin** 500mg bd. Increase to 1g bd as needed.

**2nd line: Insulin** (refer to [DIABETES TYPE II - Insulin 'How to start'](#)).

### IN LABOUR:

**Stop** all medications and monitor BSL 4 hourly whilst awaiting transfer to hospital.

# DIABETES IN PREGNANCY

## Follow-up

### PRE-EXISTING DIABETES:

- Resume pre-pregnancy medications post partum but substitute **quinapril** with **enalapril** 5 - 20mg daily if **breastfeeding** (refer to Standard Drug List transfer protocols).
- Consider / encourage **reliable contraception**.

### GESTATIONAL DIABETES:

- 75g fasting **OGTT at 6 weeks post partum** and if normal then 2 yearly follow up as per [DIABETES TYPE II 'Screening'](#).

## Refer / Discuss

### TO OBSTETRICIAN:

- Pre-existing DM at first antenatal visit.
- At time of diagnosis of gestational DM.

### TO PHYSICIAN:

- If therapeutic goals not achieved.

### FOR RETINAL SCREENING:

- As soon as possible after diagnosis of pregnancy in women with pre-existing DM without normal retinal screen in last 12 months.

