

# Gestational diabetes

## Gestational diabetes (or gestational diabetes mellitus, GDM)

When a woman is not diagnosed of diabetes but exhibits high blood pressure level during pregnancy, it is often the condition of gestational diabetes.



### 1. Classification

1. Pre-gestational Diabetes either type I or type II
2. Gestational diabetes: diabetes that develops during pregnancy

### 2. Complications of Diabetes in pregnancy

#### 1. Maternal

- Polyhydramnios: from fetal polyuria
- Nephropathy: common in pregestational diabetes, increasing the risk of preeclampsia
- Retinopathy: occurs after several years of pregestational diabetes, often deteriorates during pregnancy
- Diabetes ketoacidosis: May occur at lower glucose concentration

#### 2. Fetus

- Fetal demise: increased spontaneous miscarriage and fetal death in utero
- Respiratory distress syndrome
- Macrosomia (>4000-4500 g)
- Fetal hypoglycemia
- Hyperbilirubinemia

## 3. Screening glucose challenge test



- (1) All patient screened between 24 and 28 weeks.
- (2) With 75gm high concentration sugar water and keep fasting before test 4-6 hours.
- (3) 2 hours (75gm) Oral glucose tolerance test Intra-partum management
- (4) Nutritional counseling differs individually and it varies with patients' weight and height.
- (5) fasting glucose levels should be under 105 mg/dl. or 2-hr post-meal sugar level should be under 120mg/dl, if not, pharmacologic treatment was suggested (insulin administration)
- (6) Fetal evaluation
  - fetal activity assessment, NST (non-stress test: a 20-minute test of fetal movement and fetal heart beat relation) beginning at 32-34 wks
  - Ultrasound: first time at 18-20 weeks, and the second time is at 30-32 weeks
    - Insulin treatment: It is usually recommended that oral hypoglycemic agents be discontinued once pregnancy is diagnosed
    - Exercises like swimming and bicycle riding are highly recommended; however, riding bicycles is inappropriate toward the last stage of the pregnancy, simple walk is recommended.
- (6) During labor care
  - Maintain euglycemia (normal sugar level) during labor
  - Sugar control with Insulin drip and check sugar every hour in labor
- (7) Postpartum management
- (8) Home glucose monitoring
- (9) Diet instruction
- (10) Prevention of hemorrhage and infection
- (11) Regular postpartum blood sugar trace, and sugar test within 6 wks of delivery
- (12) Breastfeeding encouraged