

# **DIABETES DURING PREGNANCY (GESTATIONAL DIABETES)**

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Diabetes, sometimes called the “sugar illness,” is a condition in which the body’s glucose levels are above normal. Normally, the body converts food to glucose, a type of simple sugar, which is the energy source for the cells of our body. The hormone Insulin is essential for the purpose of moving the glucose out of the blood and into the cells. In people with diabetes, the pancreas does not make enough insulin or the body’s cells can’t use the insulin properly. In either case, the cells are unable to convert glucose to energy, so the glucose simply accumulates in the blood causing high blood sugar or diabetes. When the condition of Diabetes is present only during pregnancy and not when the woman is not pregnant, it is called ‘Gestational (Pregnancy) Diabetes’ – GDM. GDM is one of the common complications of pregnancy and occurs in about 5 in a 100 pregnancies.

### **RISK FACTORS**

Certain factors make it more likely for a woman to have GDM. Some of the common factors are

- High risk ethnic group e.g. Hispanic, African American, Native American
- Overweight or very overweight
- Family history of diabetes especially close relatives such as mother/father/siblings
- Age older than 25 years
- Having had a baby over 9lbs.
- GDM in a prior pregnancy – the chances of recurrence are as high as 33-50%
- Unexplained stillbirth (baby died in the uterus during pregnancy especially late pregnancy)
- Polyhydramnios (excessive fluid around the baby)

At the present time, if you have any of the above risk factors, you will be recommended to undergo an ‘early’ screening test for diabetes. If that is normal, the test will be repeated at 24-28 weeks of pregnancy. In women who do not have any risk factor, screening is done at 24-28 weeks. The screening test is done by drawing blood one hour after a sugary drink which contains 50 grams of glucose. If the sugar level in the blood is higher than 130 or 140 mg% then a further test called the 3 hour Oral Glucose Tolerance Test needs to be performed. If that test is positive, then you have Gestational Diabetes-GDM.

### **HOW WILL GESTATIONAL DIABETES AFFECT YOU?**

Women who have gestational diabetes are more likely to suffer other complications such as pre-eclampsia (high blood pressure and protein in the urine), and are at increased risk of cesarean delivery and also sudden unexplained death of the baby inside the uterus especially during the last 4-6 weeks of pregnancy. If the baby is too large (fetal macrosomia) then labor complications such as laceration injuries at delivery, difficult delivery of the shoulders (shoulder dystocia) and increased risk of post-partum bleeding and infections (due to necessary interventions) may occur.

### **HOW WILL GESTATIONAL DIABETES AFFECT THE BABY?**

If the diabetes in pregnancy is well controlled, then most women who have GDM will have normal pregnancies and normal deliveries without maternal complications or newborn complications. Good control of blood sugars during pregnancy can be done by diet, regular exercise and if necessary insulin or oral antidiabetic medications.

If however; the blood sugars are high, there is increased likelihood of fetal and neonatal complications such as

- macrosomia (large baby e.g. over 9 lbs. or 4 kilograms)
- abnormal position of the baby in the uterus due to its large size
- too much fluid around the baby (polyhydramnios)
- sudden unexplained fetal death in the uterus especially during the last few weeks of pregnancy
- complications such as slow labor, early ‘breaking of the water bag’

- increased possibility of needing cesarean delivery
- increased possibility of difficulty with delivery of the fetal shoulders (shoulder dystocia) with possibility of brachial nerve injury
- low blood sugar in the newborn baby after delivery
- increased possibility of jaundice in the baby
- newborn has difficulty breathing called 'Respiratory Distress Syndrome' especially if cesarean delivery was performed
- low potassium levels in the newborn causing muscle spasms

If you are diagnosed with GDM you will be taught to keep a 'glucose diary/log'. This is a record of your blood sugars several times during 24 hours. It is of critical importance to keep this log to know if your sugars are under good control. You must keep this log and bring it with you at each prenatal visit. If your diet and exercise program is working then your blood sugars as soon as you get up in the morning (fasting) should be below 105 mg and 2 hours after a meal should be no more than 120 mg. If blood sugars are higher than these levels, you may be started on oral medicine or insulin.

You should keep record of your baby's movement (fetal kick count) and if you feel the baby is not moving as much as it should, promptly report to your doctor. Your baby's growth and well being will be closely monitored during the pregnancy to ensure a good outcome for you as well as baby.

#### **WHAT CAN YOU DO TO HELP YOURSELF WHEN YOU HAVE GDM?**

- Do not miss any prenatal appointment
- Be very strict to follow your diet and exercise/physical activity and medication/insulin advice
- Be very aware of and report fetal kick count
- Maintain your glucose log book
- Bring your glucose log book to every prenatal visit
- Always ask questions if you do not understand what the doctor or nurse is saying to you
- If you had GDM in one pregnancy, get tested for diabetes in between pregnancies.

#### **LIFETIME RISK OF DIABETES MELLITUS AFTER GESTATIONAL DIABETES**

Remember, if you have had GDM you are at increased risk of developing diabetes even without being pregnant (type II diabetes). You can prevent or delay development of diabetes by regular exercise, eating a healthy balanced diet and above all by losing weight (if you are overweight or obese). 1 in 2 women who have had GDM will become diabetic within the next 10 years if they continue to be overweight and do not undertake a diet and exercise program. Obesity and lack of regular exercise are the two most important factors that you can correct to avoid diabetes in later life.

If you have any further questions do not hesitate to speak with your doctor. Remember, the more you know about a condition, the more power you have to control it or even prevent it.

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