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INTRODUCTION — Gestational diabetes mellitus (GDM) is a condition that develops during pregnancy when the body is not able to make enough insulin. The lack of insulin causes the blood glucose (also called blood sugar) level to become higher than normal. Gestational diabetes affects between 2 and 10 percent of women during pregnancy.

It is important to recognize and treat gestational diabetes as soon as possible to minimize the risk of complications in the baby. In addition, it is important for women with a history of gestational diabetes to be tested for diabetes after pregnancy because of an increased risk of developing type 2 diabetes in the years following delivery.

GESTATIONAL DIABETES TESTING — We recommend that all pregnant women be screened for gestational diabetes. Identifying and treating gestational diabetes can reduce the risk of pregnancy complications.

Complications of gestational diabetes can include:

- Having a large baby, which can increase the risk of injury to the mother or baby during delivery and increase the chance of needing a caesarean section
- Preeclampsia

Timing of test — Screening for gestational diabetes is usually done between 26 and 28 weeks of pregnancy. However, screening may be done earlier in the pregnancy if you have risk factors for gestational diabetes, such as:

- A history of gestational diabetes in a previous pregnancy
- Obesity
- Glucose (sugar) in your urine
- A strong family history of diabetes

Test procedure — There are a few ways to test for gestational diabetes.

Two part test — On the day of the screening test, you can eat and drink normally. You will be given 50 grams of glucose, usually in the form of a specially formulated orange or cola drink. You should drink the whole amount within a few minutes. One hour later, you will have a blood test to measure your blood sugar level.

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If your blood sugar level is normal, no other tests are done.

If your blood sugar level is higher than normal, you will need another test to know for sure if you have gestational diabetes. This test is called an oral glucose tolerance test (GTT). The test is done by measuring your blood sugar level before you eat anything in the morning (fasting), then again one, two, and three hours after you drink a glucose drink that contains 100 grams of glucose (twice the amount in the one-hour test). Similar to the one-hour test, this is usually in the form of a specially formulated orange or cola drink.

Gestational diabetes is diagnosed if you have **two or more** elevated blood sugar values.

GESTATIONAL DIABETES TREATMENT — After you are diagnosed with gestational diabetes, you will need to make changes in what you eat, and you will need to learn to check your blood sugar level. In some cases, you will also need to learn how to give yourself insulin injections.

The main goal of treatment for gestational diabetes is to reduce the risk that the baby will be large. A large baby can be hard to deliver through the pelvis (called "shoulder dystocia"). This increases the risk of injuring the baby (eg, broken bones or nerve injury). A large baby is also more likely to cause injury to the mother during the delivery.

You are more likely to have a large baby if your blood sugar levels are higher than normal during pregnancy.

Changes in diet —The following are some general dietary recommendations:

- Avoid high-calorie snacks and desserts, including soda with sugar, fruit punch, candy, chips, cookies, cakes, and full-fat ice cream
- You can use artificial sweeteners commonly called sugarfree.
- These sweeteners have not been linked to an increased risk of birth defects.
- Eat a lot of vegetables and fruits, at least five servings a day. Some fruits (like grapes, dried fruit) can increase your blood sugar level a lot and should be eaten in limited amounts. Don't eat a lot of starchy vegetables (eg, potatoes), but eat as many non-starchy fruits or vegetables as you like.
- Choose foods with whole grains. This includes whole-wheat bread, brown rice, or whole-wheat pasta instead of white bread, white rice, or regular pasta.

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- If you eat red meat, eat a small amount and only a few times during the week. Choose lean cuts of meat that end in "loin" (eg, pork loin, tenderloin, sirloin). Remove skin from chicken and turkey before eating.
- Choose low- or fat-free dairy products, such as skim milk, nonfat yogurt, and low-fat cheese
- Use liquid oils (olive, canola) instead of solid fats (butter, margarine, shortening) for cooking

Blood sugar monitoring — You will learn how to check your blood sugar level and record the results. Your diabetic educator will teach you how many times you need to check your BSL (blood sugar level) & will also give a small booklet to keep record of the same.

This information can help to determine whether your blood sugar levels are on target. If your levels stay higher than they should be, your doctor will probably recommend that you start using insulin.

If your blood sugar levels stay normal, you might be able to test less frequently for a while. But you might need to test more frequently later in the pregnancy.

Exercise — Although exercise is not a necessary part of gestational diabetes treatment, it might help to control blood sugar levels. If you were exercising before, you should continue after being diagnosed with gestational diabetes.

Most women who do not have medical or pregnancy-related complications are able to exercise, at least moderately, throughout their pregnancy.

Insulin — Approximately 15 percent of women with gestational diabetes will require insulin. Insulin is a medicine that helps to reduce blood sugar levels and can reduce the risk of gestational diabetes-related complications. Insulin is the most common medicine for treating gestational diabetes.

You must give insulin by injection because it does not work when it is taken by mouth. Most women start by giving one shot of insulin per day. If your blood sugar levels are high after eating, you may need to give a shot two or three times per day.

If you take insulin, you should check your blood sugar level at least four times per day. You also need to write down your results and how much insulin you give and review these records

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at each prenatal visit. Keeping accurate records helps to adjust insulin doses and can decrease the risk of complications.

MONITORING DURING PREGNANCY

Prenatal visits — Most women who develop gestational diabetes have more frequent prenatal visits (eg, once every week or two), especially if insulin is used. The purpose of these visits is to monitor your and your baby's health, discuss your diet, and adjust your dose of insulin to keep your blood sugar levels near normal. It is common to change the dose of insulin as the pregnancy progresses.

Nonstress testing — You may need tests to monitor the health of the baby during the last trimester of pregnancy, especially if your blood sugars have been high, you are using insulin, or if you have any pregnancy-related complications (eg, high blood pressure). The most commonly used test is the CTG.

LABOR AND DELIVERY WITH GESTATIONAL DIABETES — If your blood sugar levels are close to normal during pregnancy and you have no other complications, the ideal time to deliver is between 39 and 40 weeks of pregnancy.

If you do not deliver by your due date, you may need additional testing to monitor your and your baby's health.

In most women with a normal-size baby, there are no advantages to a caesarean delivery over a vaginal delivery.

Your blood sugar levels will be monitored during labour. Most women have normal blood sugar levels during labour and don’t need any insulin. Insulin is given if your blood sugar level becomes high. High blood sugar levels during labour can cause problems in the baby, both before and after delivery.

AFTER-DELIVERY CARE — After delivery, most women with gestational diabetes have normal blood sugar levels and do not require further treatment with insulin. You can return to your prepregnancy diet, and you are encouraged to breastfeed

Risk of gestational diabetes — One-third to two-thirds of women who have gestational diabetes in one pregnancy will have it again in a later pregnancy.

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Risk of type 2 diabetes — Women with gestational diabetes have an increased risk of developing type 2 diabetes later in life, especially if the woman has other risk factors (eg, obesity, family history of type 2 diabetes).

The risk of developing type 2 diabetes is greatly affected by body weight. Women who are obese have a 50 to 75 percent risk of type 2 diabetes, while women who are a normal weight have a less-than-25 percent risk. If you are overweight or obese, you can reduce your risk of type 2 diabetes by losing weight and exercising regularly.

It is recommended that all women with a history of gestational diabetes have testing for type 2 diabetes at least every three years after their pregnancy. Women who have gestational diabetes after age 45 should have testing once per year.

Birth control — Women with a history of gestational diabetes can use any type of birth control after delivery.