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FACT SHEET

Gestational Diabetes

Gestational diabetes is a medical condition of pregnancy that is relatively common, affecting 5 – 9% of pregnancies in Australia. Your blood sugar levels are controlled by a hormone called insulin. In pregnancy, the placenta produces certain hormones that maintain the pregnancy. Some of these hormones work against your natural insulin which causes a rise in blood sugar levels. Production of natural insulin is increased to compensate but this may not be enough. As a result, sugar levels in pregnancy may remain high. This is diabetes.

How is gestational diabetes diagnosed?

Gestational diabetes is first detectable at about 26 – 28 week's gestation. Routine screening for diabetes involves a **glucose challenge test (GCT)** at about 28 week's gestation. This is a non-fasting test where a 50g (about 10 teaspoons of sugar) glucose drink is given and a blood test is performed after 1 hour. About 25% of pregnant women will test positive to this test. These women go on to have a **glucose tolerance test (GTT)** which is a fasting test. A 75g (15 teaspoons of sugar) glucose drink is given. Blood tests are taken before the glucose drink and at 1 and 2 hours after the drink. I tend to bypass the **GCT** and go straight to the **GTT**. My reasoning is that I tend to have a diagnosis by 28 week's gestation and can start treatment immediately. If a **GCT** is done, a diagnosis may not be made until 30-31 weeks and treatment has been delayed.

What are the effects of diabetes in pregnancy?

In diabetes, the mother's blood sugar levels are consistently high. Glucose easily crosses the placenta into the baby's blood stream which in turn stimulates insulin production in the baby. The baby's blood sugar levels are thus controlled. Insulin in the baby's circulation acts like a growth factor and results in the baby growing much larger than normal. These higher insulin levels can continue to affect the baby's blood sugar levels after delivery and so babies are usually monitored in the special care nursery for 1 or 2 days.

Women with gestational diabetes have increased risks including macrosomia (large baby), polyhydramnios (too much fluid), preterm delivery and prematurity, forceps or vacuum delivery, Caesarean section, shoulder dystocia (stuck shoulders), injury to the baby and larger perineal tears. These complications can be prevented with good blood sugar control. In a small number of women, despite excellent sugar control, some complications may still occur.

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Who is at risk of gestational diabetes?

The risk factors for gestational diabetes include age over 30 years, obesity (body mass index over 30kg/m^2), a family history of diabetes and gestational diabetes in a previous pregnancy. Often women with no risk factors develop gestational diabetes, so I routinely test every patient.

What treatments are available?

Usually the results of your GTT are discussed at the 28 week visit. You will be referred to a diabetic educator who will give you more information about gestational diabetes and control of blood sugars using your diet. A blood sugar monitor will be arranged for you and you will record blood sugar levels 4 times a day. The majority of women are able to control their blood sugars with diet alone. You will need to bring your blood sugar diary to every visit.

If your blood sugar levels are consistently high, you will need to start medications. We start with Metformin which is an oral tablet, and failing that, insulin injections may be required. If your diabetes is difficult to control and medications are required, you will be referred to an obstetric physician or endocrinologist for specialist care.

With good sugar control, we aim to deliver the baby as close to the due date as possible. Fetal growth scans will be required at certain intervals to monitor the baby's growth. The majority of women will deliver by a normal vaginal delivery. Occasionally labour needs to be induced at an earlier time depending on multiple factors including poor sugar control and large baby. Diabetic women are more likely to need a Caesarean section due to difficulties with labour and delivery or fetal distress.

What should you expect after the baby is born?

After delivery, your blood sugar level will return to normal in just a few hours. No further monitoring is required. Having had gestational diabetes should not affect your ability to breast feed. Your baby's blood sugars will be monitored and, if they are low, baby may need to go to the special care nursery for a day or two. The baby may need to be given extra sugar by way of formula or even a drip.

At 6 – 12 weeks after the delivery, you will need to have a repeat **GTT**. Statistics show that up to 50% of women with gestational diabetes will develop type 2 diabetes mellitus in their lifetime. This can happen as early as 6 weeks after a delivery. To avoid this complication, it is a good idea to return to a normal weight, maintain good eating habits and exercise regularly. Remember that your children learn their eating habits at home; teaching healthy eating is very important for your children's future health.

If you have any further queries, please do not hesitate to contact us at info@ghealth.com.au

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