Gestational diabetes

Overweight and obesity, diabetes in an immediate family member and older age are all risk factors for developing diabetes during pregnancy, writes Yvonne Moloney

Gestational diabetes mellitus (GDM) is a form of diabetes that develops during pregnancy. It is a condition in pregnancy where blood glucose levels are higher than normal. During pregnancy, your placenta makes hormones that cause glucose to build up in your blood. Usually, your pancreas produces enough insulin to handle it, but if your body cannot produce enough insulin or stops using insulin as it should, your blood glucose levels rise, and you get GDM.

In most cases, you will not have any symptoms at diagnosis of GDM. The condition is partly due to genetic factors (parents or relatives may have diabetes) and it is also more likely to occur in older women, and those who are overweight or inactive before getting pregnant.

Risk factors screening

In Ireland, risk factor screening is provided for GDM, and the recommended list of risk factors to screen for are:

- Overweight and obesity
- Excessive sugar in your urine (glycosuria)
- Diabetes in an immediate family member (parent, sibling or child)
- Age 40 years or above
- Previous delivering of a baby weighing more than 4.5kg
- Family origins are South Asian, Chinese, African-Caribbean or Middle Eastern
- Polyhydramnios (scan shows extra fluid around the baby)
- Macrosomia (scan shows your baby is bigger than average)
- Previous gestational diabetes in some maternity hospitals
- Polycystic ovary syndrome
- History of an unexplained stillbirth
- Long-term treatment with steroids.

Testing for GDM

The test for GDM is a glucose tolerance test (GTT), which involves fasting, drinking a glucose load (for example a product called Rapilose OGTT Solution or Polycal) and having three blood glucose measurements analysed in the hospital laboratory.

If you had GDM in a previous pregnancy, depending on your local hospital policy, you may be treated as having GDM in future pregnancies, ie. not have a GTT. It is recommended that you contact your general practitioner (GP) as soon as you find out you are pregnant again.

You may be referred for an earlier booking appointment in the maternity hospital, a GTT and GDM education – practices differ slightly in every maternity unit, but your GP will be aware of the local system of referral. You will need to start following the diet and lifestyle guidelines from the beginning of your pregnancy.

Gestational diabetes education

You will need to discuss your diagnosis of GDM with the obstetric team providing your pregnancy care. Untreated high blood glucose levels during pregnancy may cause health problems for you and for your baby. A diagnosis of GDM in pregnancy is considered to be a high-risk pregnancy, so you will need close observation on the specialised care pathway.

Women with GDM are at possible risk of:

- Pre-eclampsia (sudden rise in blood pressure) – high blood pressure during pregnancy
- Urinary tract infection (UTI)
- Big baby on scan (known as macrosomia) – your obstetric team will discuss the birth options with you
- Polyhydramnios – increased fluid around your baby on scan
- Premature labour – labour before 37 weeks gestation.

Babies of mothers with a diagnosis of GDM are at potential risk

of certain conditions. The baby may need special care in a neonatal intensive care unit (NICU) or Special Care Baby Unit (SCBU) where most conditions are treatable.

Possible risks to the unborn baby and the baby after delivery include:

- Big baby at birth (macrosomia) - large babies are more likely to experience birth trauma such as damage to their shoulders (shoulder dystocia) during vaginal birth
- Low blood glucose (hypoglycaemia)
- Breathing problems, (transient tachypnoea of the new-born (TTN)/respiratory distress syndrome (RDS)
- Jaundice, yellowing of the skin
- Prematurity, if born before 37 weeks gestation
- Congenital abnormality, if the mother's blood glucose levels were above targets at conception and/or the first eight weeks of the pregnancy, eg. if the mother had undiagnosed/untreated diabetes or impaired glucose tolerance (IGT) outside pregnancy
- Unexplained stillbirth – there may be a slightly higher risk than normal
- Diabetes and obesity in later life.

During your pregnancy, you need to be aware of your baby's individual pattern of movements. A reduction or a change in your baby's movements is what is important.

If you notice your baby is moving less than usual or if you have noticed a change in the pattern of movements, it may sometimes be a sign that your baby is unwell and therefore it is essential that you contact your local maternity hospital immediately so that your baby's wellbeing can be assessed.

You should continue to feel your baby move right up to the time you go into labour. Your baby should move during labour too. There is no specific number of movements that is considered normal.

Further considerations

In some cases, it may be necessary to have insulin treatment or tablets during pregnancy to achieve recommended glucose levels. If insulin or tablets are required to treat your GDM, it will be discussed with and prescribed by the registered advanced midwife practitioner diabetes and/or the consultant endocrinologist providing your gestational diabetes care, and education will be provided by the diabetes midwife/nurse.

Having gestational diabetes should not stop you from breastfeeding your baby. Breastfeeding will be the same as for women without diabetes. A tip for breastfeeding includes the following: At around 37 weeks of pregnancy you can express and store/freeze some colostrum (early milk). This can be given to your baby if he/she cannot breastfeed after birth or if the baby's blood glucose level is low and the baby needs some extra milk. For further advice and support about this, ask the Parent Craft Education Team or your public health nurse.

Unless your baby needs special care in the neonatal unit, make sure your baby has skin-to-skin contact as soon as possible after birth. While doing skin-to-skin contact, start breastfeeding within one hour after birth. Your colostrum (early milk) is the best food for your baby and will help your baby's blood glucose to stay at a safe level.

If necessary, ask your midwife/nurse to help you to get your baby latched on correctly to your breast.

As per national policy, your midwife/nurse will check your baby's blood glucose level and advise you accordingly. Continue to breastfeed frequently, at least every two to three hours, maybe 8-12 times in 24 hours. It will take around two to three days for your milk to come in. In the meantime, your baby is getting the vital colostrum.

In most cases, GDM resolves after delivery. After pregnancy, for most women with GDM, blood glucose levels will return to normal after their baby is born. It is important that you have a repeat diabetes test, ideally a glucose tolerance test 6-12 weeks after your baby is born to check that your blood glucose level has returned to normal.

Future diabetes risk

There is a significantly increased risk of developing diabetes outside of pregnancy in the future. Screening for diabetes outside pregnancy is recommended every one to three years for life.

Gestational diabetes can recur in future pregnancies therefore you should be tested for diabetes before, during and after future pregnancies.

To help delay or even prevent the development of Type 2 diabetes you should maintain a healthy diet, take daily physical activity and lose some weight if you are overweight.

Attendance at a diabetes prevention programme, for example the Walking Away from Diabetes programme, will inform you about the best management plan.

Referrals to diabetes prevention programmes are accepted by the integrated diabetes care service. Your GP or practice nurse will be able to advise you on what is available in your local area.

Your guide to gestational diabetes, is available from the Health Service Executive (HSE) website on page: **www2.hse.ie/conditions/child-health/gestational-diabetes/treatment-of-gestational-diabetes.html**

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