## Plain language summary

# Fetal Growth Restriction – Recognition, Diagnosis and Management

## Who is this summary for?

This summary is for women/couples with a pregnancy affected by fetal growth restriction (FGR).

## What is this summary about?

The National Women and Infants Health Programme have developed a number of clinical guidelines. One of these guidelines is a National Guideline Fetal Growth Restriction – Recognition, Diagnosis and Management. This plain language summary will describe the key points and important take home messages from the Guideline.

## What is fetal growth restriction?

FGR means that the fetus (baby) is not growing at a normal rate. These fetuses tend to measure smaller than expected for the stage of the pregnancy. The majority of these fetuses will have an estimated weight that measures less than the tenth percentile for the stage in pregnancy. This means it is in the smallest ten out of every 100 babies.

#### Causes and risk factors?

There are many causes and risk factors for developing FGR. It occurs most commonly if the placenta is not working as well as it should be. This can happen because of high blood pressure, pre-eclampsia, smoking, illicit drug use, diabetes and it can also happen for reasons that are not yet understood.

FGR can be associated with developmental or genetic problems in the baby such as Down syndrome or Edwards syndrome. Infections that may occur during pregnancy such as Cytomegalovirus can also lead to FGR.

#### What can the woman do to reduce the risk?

Some risk factors which should be addressed prior to pregnancy to reduce the risk of FGR include:

- Stopping smoking.
- Avoiding illicit drug use.
- Maintaining healthy lifestyle with a good diet and regular exercise to maintain a healthy weight.

https://www.hse.ie/eng/about/who/acute-hospitals-division/woman-infants/clinical-guidelines/https://www.rcpi.ie/Faculties-Institutes/Institute-of-Obstetricians-and-Gynaecologists/National-Clinical-Guidelines-in-Obstetrics-and-Gynaecology

If a woman has a history of pre-eclampsia or had a small baby in a previous pregnancy due to the placenta not working as well as it should, they may be recommended to take aspirin during subsequent pregnancies to reduce the chance of FGR in a new pregnancy.

## How does FGR affect mother/baby?

Women who have a pregnancy with FGR may be more likely to develop high blood pressure or preeclampsia and therefore will have closer blood pressure and urine monitoring during the pregnancy. Pregnancies affected by FGR have the double the risk of baby loss (fetal or neonatal death) compared to normal size babies.

If women have a history of a pregnancy with FGR, there is also an increased risk that future pregnancies may also be affected by FGR so the baby's growth will be monitored more closely on scans and in clinics in subsequent pregnancies.

#### What tests are available?

FGR is diagnosed by an ultrasound scan examination of the baby. This measures the baby's estimated weight, the amniotic fluid level (fluid around the baby in the womb) and different blood vessel measurements such as the baby's umbilical cord blood flow.

The pregnancy may also be monitored with fetal heart tracings (CTGs).

After birth, the placenta should be examined to help explain why FGR happened.

## How will the pregnancy be managed?

If the baby is measuring smaller than expected, the pregnant woman will be monitored more closely with regular ultrasound scans. This can mostly be done on an outpatient basis. If the woman needs to be very closely monitored, for example with daily fetal heart tracings, she may need to be admitted to hospital for these to be facilitated on a daily basis.

If the baby is measuring smaller than expected, it is normally recommended that the baby is born before the due date. These plans and the timing of birth will depend on how severe the FGR diagnosis is and how early it happened.

The aim of management is to maximise the length of the pregnancy to try and avoid the complications of prematurity (being born early) for the baby. However, in some cases, the risks of being born early are less than the risk of continuing the pregnancy and an earlier birth may be advised in these scenarios.

Further information can be found in the following locations:

https://www2.hse.ie/conditions/babies-who-are-small-growing-slowly/

https://www.hse.ie/eng/about/who/acute-hospitals-division/woman-infants/clinical-guidelines/https://www.rcpi.ie/Faculties-Institutes/Institute-of-Obstetricians-and-Gynaecologists/National-Clinical-Guidelines-in-Obstetrics-and-Gynaecology