

# Preterm Fetal Growth Restriction (FGR)

## Whānau Information

### What is Preterm FGR?

Fetal growth restriction (FGR) is a condition where pēpi is not growing as well as expected while still inside the womb (uterus). This means pēpi is smaller in size than usual for the number of weeks of pregnancy. It is also sometimes called small for gestational age or SGA.

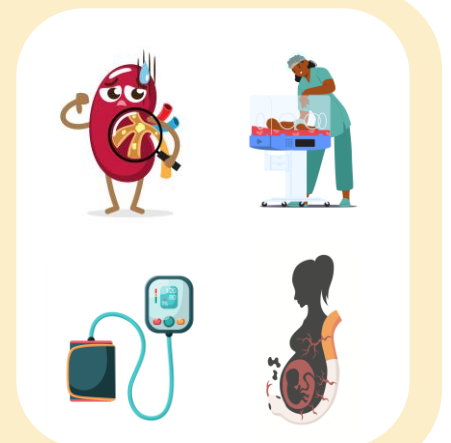
FGR can occur for many reasons, but most commonly is due to problems with the whenua/placenta and sharing of blood flow to pēpi. It usually happens near the end of pregnancy but can start earlier. When diagnosed before 32 weeks, it is called **early-onset FGR**, and this is often the more severe form of the condition. When diagnosed before 37 weeks it is called **preterm FGR**. In preterm FGR, mā mā/person and pēpi will be monitored closely, aiming to reach 37 weeks if safe to do so, but **sometimes a preterm birth is recommended**.

### Who might develop FGR & preterm FGR?

About 1 in 10–20 wāhine/people will develop FGR, but only about 1 in 100 will need a preterm birth for FGR. It can affect anyone, but the chance is higher for some. Several things influence the chance of FGR happening. These are known as 'risk factors' and are considered as 'early-onset', 'major' or 'minor'. Wāhine/people with early-onset and major risk factors have the highest chance of preterm FGR and are advised to have extra treatment and monitoring in pregnancy.

#### Early-onset and major FGR risk factors

- FGR with birth before 32 weeks in a previous pregnancy\*
- Preeclampsia with birth before 34 weeks in a previous pregnancy\*
- Chronic hypertension (high blood pressure before pregnancy)\*
- Diabetes, kidney disease or antiphospholipid syndrome\*
- Previous stillborn pēpi
- Age 40 years or more
- Smoking more than 10 cigarettes per day after 16 weeks
- Previous FGR pēpi\* or preeclampsia/gestational hypertension\*
- Heavy bleeding before or after 20 weeks in current pregnancy
- Preeclampsia or gestational hypertension in current pregnancy



### How to reduce your chance of preterm FGR



If you have one or more of the risk factors marked\* above, a **100mg aspirin tablet** taken each night from 12 to 36 weeks, is recommended to reduce your chance of preterm FGR. Your midwife or doctor will prescribe this for you. If you smoke cigarettes, you should **aim to become smoke-free by 15 weeks**. Your midwife or doctor can refer you for support with this.

**FGR may happen without any risk factors. Your midwife or doctor will measure your tummy/puku at each visit from 28 weeks. If it is smaller than expected, they will arrange an ultrasound scan to check on pēpi growth**

### Monitoring for preterm FGR

Depending on the number and type of risk factors for FGR you have, your midwife or doctor may arrange some extra **ultrasound scans to check on pēpi growth** from 24–28 weeks. These will usually be done each month.

## What happens if I am diagnosed with preterm FGR

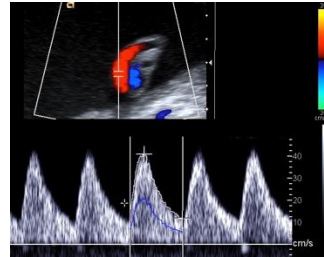


Once preterm FGR has been diagnosed on an ultrasound scan your midwife will refer you to an obstetric doctor at your local hospital. How quickly you are seen will depend on the ultrasound results, but this is usually within two weeks. If you have early-onset FGR (before 32 weeks), you may also be referred to your nearest fetal medicine service.

You may be offered some extra tests to consider the reasons that pēpi is small. These may include blood tests, additional ultrasound scans and an amniocentesis (a needle test into the fluid around pēpi).

Unfortunately, there is no effective treatment for FGR to help pēpi grow. Once preterm FGR has been diagnosed, extra monitoring will be planned for pēpi. **Preterm birth may be recommended** if there are signs that pēpi may become sick if they stay inside the womb. Wahine/people with pregnancies affected by FGR have a **higher chance of developing preeclampsia** and so need extra blood pressure monitoring.

The medical teams caring for you will use several factors to decide if you should be monitored in the hospital or from home, and whether a preterm birth should be recommended. This will include ultrasound scan results including blood flow patterns called Doppler waveform studies and CTG (cardiotocograph, used to check pēpi heart rate) monitoring, and whether you have preeclampsia.



### What are the signs & symptoms of concern with preterm FGR?

- Pēpi is moving less
- Puku/tummy/abdominal pain
- Bleeding from the vagina
- Any signs or symptoms of preeclampsia – headaches, changes in vision, swelling in hands, legs or face, nausea or vomiting, feeling generally unwell

**If you experience any of these signs and symptoms contact your midwife or doctor as soon as you can to arrange an urgent check including pēpi monitoring and your blood pressure**



### What are the risks for pēpi with preterm FGR?

A few pēpi with preterm FGR will be significantly affected by the limited whenua/placenta supply. If this continues, it may be harmful to pēpi and can lead to **stillbirth** (this is rare). FGR pēpi also have a higher chance of problems in the **newborn period** (needing help with feeding, breathing and control of blood sugar and temperature levels), in **childhood** (neurodevelopmental delay) and as **adults** (heart disease, diabetes and weight problems). To avoid the risk of stillbirth, preterm birth may be recommended. This means pēpi then has the **risks associated with preterm birth**, many of which are similar to the risks of FGR.

### What happens if preterm birth is recommended?

- If it is considered that preterm birth is safest for you and pēpi, you will be offered treatments to help pēpi after birth e.g. corticosteroid injections and a magnesium sulphate infusion
- If a preterm birth is planned, pēpi should be cared for in a hospital with the right level of neonatal care. This may mean those caring for you recommend moving you to a different hospital (called *in utero* transfer) so this care is available for pēpi straight after birth
- Preterm FGR does not mean a caesarean section birth is always required. It may be recommended if blood flow patterns or heart rate monitoring suggest vaginal birth is less safe for pēpi
- Remember to talk to your doctors and midwives about including the whānau that you want present for your birth and any cultural birthing practices that are important to you
- Once you have a pēpi with preterm FGR, there are some additional risks for you in future pregnancies and as you get older. The doctors caring for you will provide information on this.

This Carosika Collaborative whānau information tool should be provided and used to support conversations between whānau and healthcare providers.

For more information including **preterm preeclampsia**, **interventions that optimise outcomes after preterm birth** (e.g. corticosteroids) and the **longer-term impact of preterm FGR** and access to Taonga Tuku Iho (national best practice guide), you can visit the Carosika Collaborative website [www.carosikacollaborative.co.nz](http://www.carosikacollaborative.co.nz) or use the QR code.

