

# Fetal growth surveillance pathways

## Risk assessment for fetal

### Type of document

	Clinical Guideline (should do)
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#### Quick Reference Guide

For example:

<https://viewer.microguide.global/guide/1000000295#content,0246bdf4-1d44-48b6-a1e7-4d4cbaa6d8ed>

The link refers the reader to a completed policy example to assist completion

## 2. Indications

### 2.1 Background

SGA fetuses are at greater risk of stillbirth, intrapartum hypoxia, neonatal complications, impaired neurodevelopment and possibly diabetes and hypertension in adult life.

An SGA fetus or baby may be constitutionally small; i.e. have reached their growth potential and be 'normal'. However, there may be other underlying causes including placental insufficiency, chromosomal and other genetic abnormality, congenital infection and maternal disease.

### 2.2 Aim/purpose

To identify the FGR fetus and provide optimum care, so reducing the perinatal morbidity and mortality rates.

### 2.3 Patient/client group

All women booked for pregnancy care at SFT

### 2.4 Exceptions/ contraindications None

### 2.5 Options

### 2.6 Definitions

There are no universally accepted definitions for FGR.

For the purposes of this guideline, birthweight, ultrasound Estimated Fetal Weight (EFW) or Abdominal Circumference (AC) < 10<sup>th</sup> centile are used.

The term does not distinguish between those who have fetal growth restriction (FGR) i.e. those who have failed to reach their growth potential and those who are constitutionally small.

Not all fetuses with FGR will be SGA.

The definitions recommended with the Saving babies Lives Care bundle V2 are as below:

**Definition of FGR in a previous pregnancy as a risk factor:** defined as any of the following:

- birthweight <3rd centile
- early onset placental dysfunction necessitating delivery <34 weeks
- birthweight <10th centile with abnormal fetal dopplers

**Definition of FGR in a current pregnancy:** defined as either of the following:

- EFW or abdominal circumference (AC) <3rd centile
- EFW or AC <10th centile with abnormal fetal dopplers

## 3. Clinical Management

### 3.1 Staff & equipment

Doctors and Midwives appropriately trained in Growth Assessment Protocol  
Ultrasound equipment and trained sonographers

### 3.2 Method/procedure

#### 3.2.1 Aspirin to reduce Early Onset Fetal Growth Restriction and Pre-eclampsia

Aspirin has been shown to reduce the risk of placental dysfunction, especially pre-eclampsia.

All women should have the Aspirin Risk Assessment completed by the booking midwife.

If there are *2 moderate risk factors* or *one high risk factor*, the midwife at booking should:

1. advise the woman to commence aspirin 150mg once daily at night from 12 weeks until 36 weeks (if no contraindications).
2. explain that this reduces the risk of severe pre-term pre-eclampsia and growth restriction, both caused by placental problems.

Contraindications:

1. previous significant upper GI ulcers or bleeding
2. aspirin allergy
3. hypersensitivity to other NSAIDs (eg ibuprofen)
4. women with asthma who give a clear history of aspirin allergy (this is unusual).

Risk level	Risk factors	Recommendation
<b>High</b>	<ul style="list-style-type: none"> <li>• Essential hypertension</li> <li>• Previous pregnancy with gestational hypertension / pre-eclampsia</li> <li>• Previous baby &lt;10<sup>th</sup> centile</li> <li>• Stillbirth</li> <li>• Placental histology confirming placental dysfunction in a previous pregnancy</li> <li>• Type 1 or type 2 diabetes</li> <li>• Autoimmune disease (eg: systemic lupus erythematosus or antiphospholipid syndrome)</li> <li>• Chronic kidney disease</li> <li>• PappA &lt;0.41</li> <li>•</li> </ul>	Recommend aspirin 150mg if the woman any of these high risk factors
<b>Moderate</b>	<ul style="list-style-type: none"> <li>• First pregnancy</li> </ul>	

If additional scans have been arranged for women as part of the screening for fetal growth restriction, SFH measurements are not required unless there is clear documentation to do so.

If scans are planned to start later eg 32 weeks, perform SFH measurement at every contact >24 weeks until then.

A repeat scan is not indicated if there has been a normal scan within the last 2-3 weeks.

Midwives may request a scan for a clinically small baby without review by a doctor first if the clinical situation fits the criteria described above (regarding SFH measurement).

If the EFW plots between the 10<sup>th</sup> and 90<sup>th</sup> centile and is following the centile curve, and the liquor volume is normal, the woman will be asked to attend her next antenatal appointment as planned (this should already have been confirmed with the woman by the referring midwife or obstetrician). *If resources permit a scan EFW should be repeated in 3 weeks time to ascertain velocity as a single scan cannot provide reassurance about the growth velocity of the fetus*

If the EFW does not plot within the 10<sup>th</sup> and 90<sup>th</sup> centile, or is not following a centile curve, or there are concerns regarding the liquor volume or umbilical artery Doppler, then the patient should be reviewed in the ANC by obstetric team to determine the appropriate pathway and level required for investigations and surveillance.. FMU advice should be sought if there is significant concern before 32-34 weeks.

The subsequent management should adhere to the GAP care pathway (Appendix)

### **3.2.4 Growth scan documentation**

At the growth scan the sonographer should:

- Confirm dating of the pregnancy by reviewing the previous scans
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### **3.2.5b SGA - normal fetal Dopplers (less than 36+0 weeks)**

- AC <10th centile or EFW < 10<sup>th</sup> centile
- Slow or static growth

Refer for review in ANC on the day of the scan.

Midwife:

-

### 3.2.5e Incidental Doppler abnormality NOT SGA

- AC and EFW >10<sup>th</sup> centile
- Umbilical PI >95<sup>th</sup> centile (positive EDF) or MCA <10<sup>th</sup> (redistribution)

Sonographer:

Check biometry >10<sup>th</sup> centile and FM normal, ensure technically adequate measurement, repeat if necessary

Refer for consultant review in ANC on the day of the scan.

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*Between 24 – 36 weeks' gestation:*

Timing of delivery for preterm SGA or FGR should be made by Consultant only

Consider referral to, or discussion with, Southampton FMU

Delivery will be determined by a combination of computerised CTG ,EFW and Dopplers, including CPR MoM

Steroids should be considered if delivery is anticipated < 35 weeks.

Magnesium sulphate should be considered (as per the preterm labour guideline), for all fetuses <34+0 weeks

*More than 36 weeks*



**Flow Chart for Management of Growth Scans**



**MicroGuide**

	Advice from Dr Sian McDonnell – Consultant Obstetrician, Ashford and St Peter's NHS Foundation Trust				
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**Author Name and Date**

**Appendix One**

