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Reference No: SG 187/11

Title:	**Management of Small for Gestational Age (SGA)**		
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Date	Version	Policy Author	Comments
16/11/2019	1.1	A Hunter	Policy reviewed
	1.2	H Watson	Policy updated
	1.3	KA Eastwood	
10/06/2020	1.4	A Hunter	
22/07/2020	1.5	A Hunter KA Eastwood H Watson	Final draft before consultation

1.0 INTRODUCTION / SUMMARY OF POLICY

1.0 Introduction

Fetal growth restriction (FGR) is the biggest risk factor for stillbirth. The principle aim of screening and surveillance is to detect fetal growth restriction.

The aim of this guideline template is to outline the methods used to assess fetal growth and referral pathways utilizing customised antenatal growth charts. This guideline is relevant to all healthcare professionals involved in the care of pregnant women including midwives, general practitioners, obstetricians and sonographers.

This guideline addresses:

- Use and production of a customised growth chart
- Booking risk assessment
- When and how to measure fundal height using a standardised technique
- When to refer to ultrasound for a growth scan
- Serial growth scans for women at increased risk of fetal growth restriction

1.2 Definitions

Small for Gestational Age (SGA) is defined as a weight (fetal or at birth) measurement below the 10th centile and can be applied to fundal height, estimated fetal weight (EFW) or birth weight.

Fetal Growth Restriction (FGR) is used to define fetal growth that is slow or static. There is no accepted definition, but many define FGR by the rate of growth according to serial fundal height or ultrasound EFW measurements (regardless of whether they are already below the tenth centile or not), with or without abnormal umbilical or fetal Doppler flow measurements.

Identifying FGR as a risk factor from a previous pregnancy:

- Birthweight <3rd centile
- Early onset placental dysfunction necessitating delivery <34 weeks
- Birthweight <10th centile with evidence of placental dysfunction (abnormal umbilical artery Doppler – absent / reversed end diastolic flow (EDF) or pulsatility index (PI) >95th centile)

Identifying FGR in an ongoing pregnancy:

- EFW <3rd centile
- EFW centile with growth velocity crossing centile line and evidence of placental dysfunction, eg. Abnormal umbilical artery in a suspected case of abnormal fetal growth or reduced fetal movements

Suboptimal fetal growth:

- Increase in EFW <280g over 14 days (20g per day) from 34 weeks

1.3 Objectives

- To increase the antenatal detection of SGA and reduce complications such as stillbirth and birth asphyxia by ensuring that there are guidelines in place for all

health care professionals involved in the assessment of fetal growth. In addition, the Regional IT system Northern Ireland Maternity System (NIMATS) has introduced the means to detect SGA at birth and will allow notes within the Belfast HSC Trust (BHSCT) to be examined to see if this was detected in the antenatal period.

- To ensure that there is accurate fetal surveillance, through standardised fundal height measurements of low risk women and serial growth scans for increased risk women
- To ensure that serial fundal height measurements (FHM) are plotted correctly on customised growth charts
- Where growth problems are suspected from fundal height measurements, referral for a growth scan and appropriate further investigations to assess fetal well-being should be undertaken as soon as possible, ideally within 72 hours
- Where a problem has been identified, referral is indicated to a consultant-led clinic for discussion and agreement of an appropriate management plan, to be seen as soon as possible.
- To ensure that there is identification of all infants born below the 10th customised centile at birth and appropriate management initiated postnatally.

2.0 SCOPE OF THE POLICY

This guideline is relevant to all healthcare professionals involved in the care of pregnant women including general practitioners (GP's), sonographers, midwives and obstetricians - particularly in the following areas:

- Antenatal clinics (ANC)
- Community midwife/GP clinics
- Admissions unit
- Day Obstetric unit (DOU)
- Antenatal inpatient ward

3.0 ROLES AND RESPONSIBILITIES

Managers and clinical leads must bring this guideline to the attention of all relevant healthcare professionals in order that those pregnancies deemed to be at risk of FGR or those babies diagnosed as SGA can be managed appropriately.

3.1 All healthcare professionals involved in the antenatal care of pregnant women to risk assess at booking, during pregnancy and arrange serial growth scanning if increased risk of fetal growth problems or if fundal height measurements are not accurate.

3.2 For customised growth charts to be generated for every pregnancy and used to plot fundal height measurements +/- estimated fetal weight (EFW) measurements.

3.3 Continuing professional development is the responsibility of the individual practitioner.

4.0 CONSULTATION

Consultant Obstetricians, trainee Obstetricians, Early Obstetric Unity, Maternity ward, Labour ward, Antenatal clinic managers, Midwife Sonographers, Obstetric Sonographers, Community Midwives, Head of Midwifery and Gynaecology, Lead Midwives, Consultant Midwife.

5.0 POLICY STATEMENT/IMPLEMENTATION

5.1 Key Policy Principles

5.1.1 Customised Growth Charts

5.1.2 Customised to each individual taking into account their height, weight, ethnicity and parity. Birth weights of previous children need to be inputted to identify previous problems with growth.

5.1.3 The charts show the 3rd, 10th, 50th, 90th and 97th centile lines. A box in the top left-hand corner is where the woman's height, weight, ethnicity and parity are shown. A customised centile will be calculated for each previous delivery and displayed in the previous baby details box. A customised growth chart should be generated after the booking scan with the correct EDC confirmed following the booking (dating) scan. Gridlines by weight should be selected when generating the chart, as this will enhance the accuracy of plotting of FHM and EFW when a set square is used.

5.1.4 Plotting fundal heights and estimated fetal weight on customised charts has demonstrated increased antenatal detection of SGA fetuses and a reduction in unnecessary investigations.

5.2 Identification Of Risk Factors For SGA at the Booking Appointment

5.2.1 All women should be assessed at booking for risk factors for a SGA fetus to identify those who require increased surveillance (see Table 1). The 'BHSCT flowchart for SGA risk assessment' tool must be undertaken at the booking appointment to determine risk of SGA in this pregnancy. It is known from the evidence that SGA fetuses are at greater risk of stillbirth, birth hypoxia, neonatal complications and impaired neurodevelopment. However, the majority of term SGA infants have no appreciable morbidity or mortality.

Table 1.

Risk Factors	
Moderate risk factors	**Major risk factors**
Previous SGA baby (<10th centile)	Maternal medical conditions (autoimmune disease [Systemic Lupus Erythematosos (SLE), Antiphospholipid syndrome (APLS)], chronic kidney disease, hypertension, diabetes with vascular disease, renal impairment, cyanotic congenital heart disease)

Previous stillbirth (appropriate weight for gestational age)	Previous FGR (Birthweight centile <3rd centile)
Maternal age ≥40 years at booking	Hypertensive disease in a previous pregnancy (Pregnancy induced hypertension (PIH) and proteinuria)
Current smoker at booking (any)	Previous SGA stillbirth
Substance abuse (specifically cocaine)	EFW <10th centile
BMI ≥35kg/m^2	Significant Antepartum haemorrhage (APH/recurrent APH)
Fibroids (single >5x5cm or multiple)	Fetal abnormality – echogenic bowel/single umbilical artery/cardiac anormality
Recurrent miscarriage (≥2 consecutive losses)	

5.2.2 Most instances of FGR are late-onset; surveillance of all pregnancies is required throughout pregnancy and should reflect the level of risk:

- **Low risk**: standardised FHM from 26-28 weeks gestation until delivery, plotted on a customised growth chart
- **Moderate risk:** 4 weekly Ultrasound scan (USS) assessments of fetal growth from 32 weeks gestation until delivery
- **High risk:** 2-3 weekly USS assessments of fetal growth from 28 weeks gestation until delivery

5.2.3 Women who have a **single** major risk factor should be referred for serial USS of fetal size and assessment of wellbeing with umbilical artery Doppler from 28 weeks of pregnancy. The consultant-led team will arrange for serial scans at least every 2-3 weeks from 28 weeks until delivery (earlier gestation or higher frequency in individual cases).

Women who have a **single** moderate risk factor should be referred for serial USS of fetal size and assessment of wellbeing with umbilical artery Doppler from 32 weeks of pregnancy. The consultant-led team will arrange for serial scans at least every 4 weeks from 32 weeks until delivery

Women with multiple moderate risk factors could be considered for scans from earlier in the pregnancy following discussion with the consultant.

5.2.4 Women in whom FHM is inaccurate due to: e.g. BMI >35, large fibroids (single >5x5cms or multiple), or there is a clinical suspicion of polyhydramnios should be referred for serial USS of fetal size and assessment of wellbeing with umbilical artery Doppler from 32 weeks of pregnancy and 4 weekly thereafter until delivery (moderate risk factor).

5.2.5 Consider the use of aspirin in women who have had a baby with previous SGA, previous pre-eclampsia or chronic hypertension. Must be commenced before 16 weeks gestation to have any effect (See Appendix 1).

5.2.6 Benefits, information and advice about stopping smoking, engaging with the smoking cessation midwives, and attendance at interventions aimed at smoking cessation should be given from booking and from subsequent antenatal encounters.

5.3 Location of Growth Scans

5.3.1 Serial scans can be arranged for **consultant-led** clinics or **midwife-led** growth clinics – depending on risk factors present:

From Booking assessment – Serial scanning at consultant-led clinic	From Booking assessment – Serial scanning at midwives growth clinic (1 risk factor only)
Previous stillbirth	Maternal age >40yrs
Diabetes	Smoker
Chronic HTN	Previous SGA baby
Renal impairment	BMI ≤35
Echogenic bowel Cyanotic congenital heart disease Single umbilical artery	Recurrent miscarriage (2 or more recurrent losses)
IVF pregnancy	
APLS, SLE	
Pre-eclampsia	
Chronic Hypertension or PIH	
Heavy bleeding similar to menses	
Known fibroids (single5x5cm/or multiple)	
Current drug misuse	
Previous FGR (see 1.2)	

5.4 Assessment of Fetal Growth

5.4.1 Not all pregnancies are suitable for primary surveillance by FHM, and require ultrasound biometry instead.

5.4.2 Women who are recognised as low risk and suitable for midwifery led care (MLC) should have FHM undertaken as a primary screening toolfor assessment of fetal

wellbeing.

5.4.3 These should commence from 26 -28 weeks gestation and carried out at an interval of not less than 2-3 weekly, until delivery.

5.4.5 FHM should reflect the expected trend of growth on the customised growth chart.

5.4.6 Where there are concerns about a possible SGA fetus the emphasis is on clinical judgement. The presence or absence of risk factors must be taken into consideration and the referral of patients for an obstetric opinion must be made on an individual basis.

5.5 How to perform a FHM:

5.5.1 The FHM should be performed with the mother in a semi- recumbent position, with an empty bladder and the uterus relaxed and non- contracting.

5.5.2 It is recommended that the clinician uses both hands to perform an abdominal palpation, identifies the highest point of the uterine fundus then leaves one hand on the fundus.

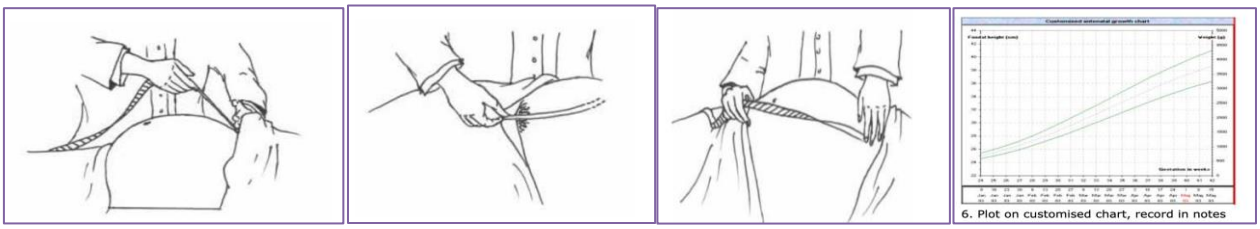
5.5.3 A non-elastic tape-measure, starting at zero, is placed on the uterine fundus at the highest point (which may or may not be in the midline).

5.5.4 The tape measure should then be drawn down to the top of the symphysis pubis (in the midline) and the number read in whole centimetres.

5.5.5 To reduce the possibility of bias, the tape measure should be used with the cm side hidden, and the measurement should be taken once only.

5.5.6 The FHM should be documented in the customised growth chart using a set square and whole centimetres with the value plotted using a cross.

5.5.7 The method for FHM is explained below the customised growth chart to support standardised practice, and can be visualised in the images below.



5.5.8 FHM should be carried out 2-3 weekly from 26-28 weeks gestation until delivery.

5.9 Reasons for referral for a Growth USS

5.9.1 The centile lines on the customised growth chart provide the reference curves (not absolute values) for the expected growth velocity of fundal height and fetal weight. Referrals for a growth scan should be arranged following a FHM if:

- **Below the 10th centile:** The first fundal height plotted is below the 10th centile (see Appendix 3).

- **Static fetal growth** – consecutive measurements suggest NO growth (static or flat curve) (See Appendix 4).
- **Slow growth** – curve not following slope of any curve on the chart (See Appendix 5).
- **Excessive or accelerative growth**: Curve steeper than any curve on the chart. If there is a clinical suspicion of polyhydramnios or there is excessive growth on subsequent measurements, an Oral Glucose Tolerance Test (OGTT) should be organised and a referral should be made to a consultant-led clinic for assessment (See Appendix 6).

5.10 Referral Process

5.10.1 If no other risk factors are present, refer for an appointment for a growth scan within 72 hours. This appointment for an USS can be at the patient's booked consultant clinic, midwives growth clinic or nearest consultant-led antenatal clinic if not previously under consultant care. If other risk factors are present e.g. reduced fetal movement, hypertension etc. a more urgent referral is appropriate and referral should be made to Admissions– Emergency Obstetric Unit RJMS.

5.10.2 If staff are unsure regarding the urgency of the case they should phone the hospital and speak to the consultant or registrar on call using Vocera or via labour ward. When referring the patient for a growth scan, there must be clear documentation in the antenatal notes of the reason for referral and any other relevant history using the SBAR communication tool.

5.11 Diagnosis of the SGA fetus

5.11.1 Accurate estimation of gestational age is vital and it is recommended that all suspected SGA should have an USS undertaken by an experienced practitioner.

5.11.2 The EFW should be determined using four measurements - Abdominal Circumference (AC), Biparietal diameter (BPD), Head circumference (HC), Femur Length (FL) (Hadlock IV)

5.11.3 EFW should be plotted accurately on the customised growth charts (with a circle) using a set square for accuracy of plotting. The, amniotic fluid volume should be assessed, documenting deepest vertical pool (preferable) or amniotic fluid index (AFI). Oligohydramnios is AFI <5, single pocket <2cms.

5.11.3 The SGA fetus should have an umbilical artery Doppler carried out, with a need to ascertain PI above 90th centile/ or absent /reversed EDF, inform senior obstetrician.

5.11.4 The consultant should be informed of the diagnosis of SGA and the woman should be transferred (if MLC) under the care of a consultant.

5.11.5 The consultant may consider further referral to fetal medicine/genetic clinic for a structural survey to assess for potential congenital defects or chromosomal aneuploidy (especially if severe SGA (<3rd centile) /or the onset is before 34 weeks gestation)**.**

5.12 Monitoring

5.12.1 If EFW found to be below 10th centile or reduced growth velocity is confirmed, along with normal liquor volume and a normal umbilical artery Doppler, then a repeat scan should be performed in 2 weeks. The management plan should be clearly documented in the maternity hand held record (MHHR).

5.12.2 If EFW found to be below 10th centile or reduced growth velocity is confirmed with oligohydramnios and/or abnormal umbilical artery Doppler then a Cardiotocography (CTG) should be performed. A decision on further surveillance, timing of surveillance and management should be made by the consultant. USS should be performed weekly for fluid/umbilical artery Doppler and every 2 weeks for EFW, fluid, Doppler.

5.12.3 Umbilical artery Doppler should be the primary surveillance tool in the SGA fetus.

5.12.4 Ongoing surveillance for fetal growth, with other concerning features, should be performed with an interval of no sooner than 14 days.

5.13 Timing Of Delivery

5.13.1 If EFW <3rd centile, or decreasing growth velocity with EFW ,10th centile diagnosed later in the pregnancy, delivery should be initiated at 37+0 weeks and delivery no later than 37+6 weeks. If other concerning features eg. Abnormal umbilical artery Doppler, reduced fetal movements, abnormal CTG are present, delivery prior to 37+0 should be a consultant decision.

5.13.2 For all fetuses with an EFW> 3rd <10th centile, where FGR has been excluded ie – growth continues normally along that centile and there are no other concerning features, delivery or induction of labour should be offered at 39+0 weeks, after discussion with the mother. All women with FGR and SGA should be advised to report if they experience reduced fetal movements or symptoms of pre- eclampsia.

5.13.3 For EFW between 3rd and 10th centile, other features eg oligo/RFM/PIH must be present for delivery to be recommended before 39+0 weeks. Timing of delivery should be a consultant decision.

5.13.4 For those women who decline delivery or induction after 39+0 weeks, the risks and benefits of early delivery should be discussed including the increased risks of stillbirth, neonatal encephalopathy and longer-term neurodevelopmental concerns.

5.13.5 Steroids should be deliverered before 34 weeks gestation, within 7 days of birth and ideally within 24-48 hours of delivery.

5.13.6 Aim to provide continuity of care within one consultant clinic if possible. Concerns or timing of delivery should be discussed with the most senior doctor at the clinic

5.14 Delivery and Monitoring

5.14.1 Mode and timing of delivery is a consultant only decision. Severe SGA/FGR with absent/reversed umbilical artery Doppler mean that the fetus is not suitable for labour. In these cases delivery by elective caesarean section may be appropriate.

5.14.2 For women having Induction of Labour (IOL) for SGA/static growth fetus they should have inpatient IOL if: FGR less than 5th centile; with abnormal Dopplers; decreased liquor; abnormal FM or CTG then woman must be kept as an in-patient.

5.14.3 Early admission is recommended in women in spontaneous labour with a SGA fetus in order to instigate continuous fetal heart rate monitoring (not suitable for care in a midwife led unit (MLU) – freestanding or alongside).

5.14.4 Continuous Electronic fetal monitoring (EFM) is recommended in labour and if the fetal heart rate (FHR) deteriorates then delivery should be expedited.

5.14.5 All birthweights should be recorded on the GROW software so that undiagnosed SGA can be detected and this information used to inform management of future pregnancies.

5.15 Dissemination

This guideline will be disseminated to all health care professionals providing care within maternity services.

5.16 Resources

Information and guidance are available from the Perinatal Institute and from NHS England 'Saving Babies Lives' Care Bundle version 2.

6.0 MONITORING AND REVIEW

This guideline contains the current evidenced based thinking on this topic, however data and statistics are routinely collected and correlated and should the need arise it will be updated.

7.0 EVIDENCE BASE/REFERENCES

- RCOG (2013) Guideline No.31 The Investigation and Management of the Small for gestational Age Fetus.
- Perinatal Institute for Maternal and Child Health 2007 available at http://www.perinate.org/growth/fhm.htm
- "The Saving Babies' Lives Care Bundle – Version 2" NHS England https://www.england.nhs.uk/wp-content/uploads/2019/05/saving-babies-lives-care-bundle-version-two.pdf

- "Fetal growth surveillance – Current guidelines, practices and challenges" Mandy Williams, Sue Turner, Emily Butler, Jason Gardosi

- "Effect of serial scan frequency on antenatal detection of fetal growth restriction" M Southam, M Williams, A Malik, J Gardosi https://fn.bmj.com/content/99/Suppl_1/A104.3?sid=dca3dab2-a1e0-43a9-b9a9-248c63d75adf

- "The Growth Assessment Protocol: a national programme to improve patient safety in maternity care" sally Clifford, Sally Giddings, Michelle Southam, Mandy Wiliams, Jason Gardosi MIDRIS Midwifery Digest 23:4 2013

- Preterm Labor and Birth Guideline 25, NICE, 2019

- Corticosteroids for Women, Quality Statement 5 – Corticosteroids 24-33+6 weeks in pregnancy, NICE, 2019

8.0 APPENDICES

Appendix 1: Medication to Reduce Pregnancy Complications
Appendix 2: Belfast Trust risk assessment flowchart for SGA
Appendix 3: First plot below the 10th centile example (taken from the Perinatal Institute)
Appendix 4: Static growth example (taken from the Perinatal Institute)
Appendix 5: Slow growth example (taken from the Perinatal Institute)
Appendix 6: Accelerated or excessive growth example (taken from the Perinatal Institute)

9.0 NURSING AND MIDWIFERY STUDENTS

Nursing and/or Midwifery students on pre-registration education programmes, approved under relevant 2018/2019 NMC education standards, must be given the opportunity to have experience of and become proficient **in Management of Small for Gestational Age (SGA)** where required by the student's programme. This experience must be under the appropriate supervision of a registered nurse, registered midwife or registered health and social care professional who is adequately experienced in this skill and who will be accountable for determining the required level of direct or indirect supervision and responsible for signing/countersigning documentation.

Direct and indirect supervision

- Direct supervision means that the supervising registered nurse, registered midwife or registered health and social care professional is actually present and works alongside the student when they are undertaking a delegated role or activity.
- Indirect supervision occurs when the registered nurse, registered midwife or registered health and social care professional does not directly observe the student undertaking a delegated role or activity. (NIPEC, 2020)

This policy has been developed in accordance with the above statement.

Wording within this section must not be removed.

10.0 EQUALITY IMPACT ASSESSMENT

The Trust has legal responsibilities in terms of equality (Section 75 of the Northern Ireland Act 1998), disability discrimination and human rights to undertake a screening exercise to ascertain if the policy haspotential impact and if it must be subject to a full impact assessment. The process is the responsibility of the Policy Author. The template to be complete by the Policy Author and guidance are available on the Trust Intranet or via this **link**.

All policies (apart from those regionally adopted) must complete the template and submit with a copy of the policy to the Equality & Planning Team via the generic email address equalityscreenings@belfasttrust.hscni.net

The outcome of the equality screening for the policy is:

Major impact ☐
Minor impact ☐
No impact ☐

Wording within this section must not be removed

11.0 DATA PROTECTION IMPACT ASSESSMENT

New activities involving collecting and using personal data can result in privacy risks. In line with requirements of the General Data Protection Regulation and the Data Protection Act 2018 the Trust considers the impact on the privacy of individuals and ways to militate against any risks. A screening exercise must be carried out by the Policy Author to ascertain if the policy must be subject to a full assessment. Guidance is available on the Trust Intranet or via this **link**.

If a full impact assessment is required, the Policy Author must carry out the process. They can contact colleagues in the Information Governance Department for advice on Tel: 028 950 46576

Completed Data Protection Impact Assessment forms must be returned to the Equality & Planning Team via the generic email address equalityscreenings@belfasttrust.hscni.net

The outcome of the Data Protection Impact Assessment screening for the policy is:

Not necessary – no personal data involved ☐
A full data protection impact assessment is required ☐
A full data protection impact assessment is not required ☐

Wording within this section must not be removed.

12.0 RURAL NEEDS IMPACT ASSESSMENT

The Trust has a legal responsibility to have due regard to rural needs when developing, adopting, implementing or revising policies, and when designing and delivering public services. A screening exercise should be carried out by the Policy Author to ascertain if the policy must be subject to a full assessment. Guidance is available on the Trust Intranet or via this link.

If a full assessment is required the Policy Author must complete the shortened rural needs assessment template on the Trust Intranet. Each Directorate has a Rural Needs Champion who can provide support/assistance.

Completed Rural Impact Assessment forms must be returned to the Equality & Planning Team via the generic email address equalityscreenings@belfasttrust.hscni.net

Wording within this section must not be removed.

13.0 REASONABLE ADJUSTMENT ASSESSMENT

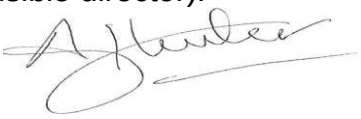
Under the Disability Discrimination Act 1995 (as amended) (DDA), all staff/ service providers have a duty to make Reasonable Adjustments to any barrier a person with a disability faces when accessing or using goods, facilities and services, in order to remove or reduce such barriers. E.g. physical access, communicating with people who have a disability, producing information such as leaflets or letters in accessible alternative formats. E.g. easy read, braille, or audio or being flexible regarding appointments. This is a non-delegable duty.

The policy has been developed in accordance with the Trust's legal duty to consider the need to make reasonable adjustments under the DDA.

Wording within this section must not be removed.

SIGNATORIES

(Policy – Guidance should be signed off by the author of the policy and the identified responsible director).



20/12/2020

_____ **Date:** _____

Policy Author

17/02/2021

_____ **Date:** _____

Director

Appendix 1

Medication to Reduce Pregnancy Complications

1. Folic add 400ug daily(increased to 5mg with FHx NTD, certain medications, BMI>30)
2. Vitamin D 10ug/day
3. Aspirin 150mg in some women

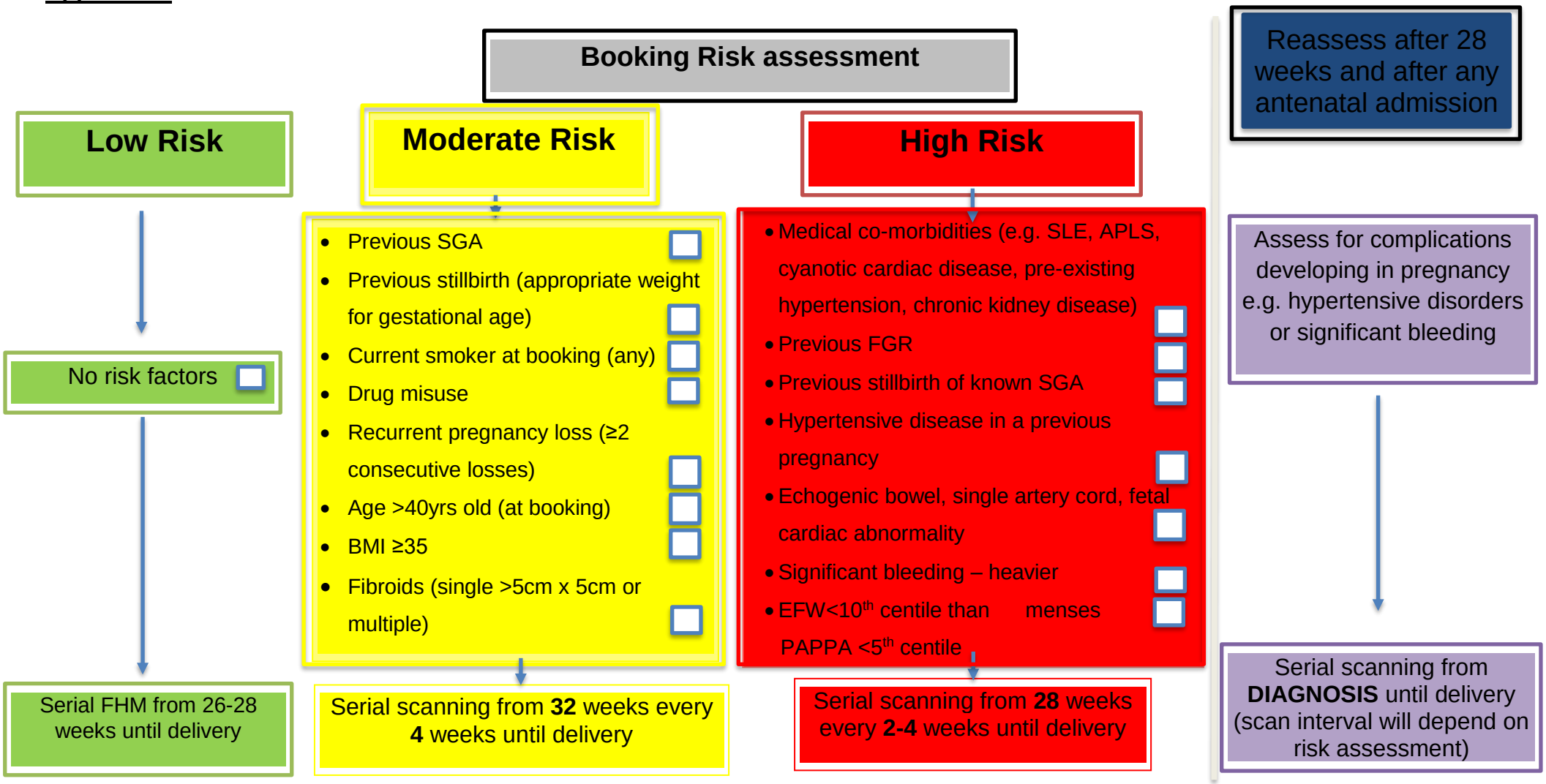
RCT evidence that aspirin reduces pregnancy complications arising frrm placental dysfunction particularly HX of pre-eclampsia but also FGR

Aspirin 150mg (may be more effective if taken at night) devised in the following cases - 75mg may be preferable in those with hepatic or renal disease).

Risk level	Risk factors	Recommendation
High	• Hypertensive disease during a previous pregnancy • Chronic kidney disease • Autoimmune disease such as systemic lupus erythematosus or antiphospholipid syndrome • Type 1 or type 2 diabetes • Chronic hypertension • Placental histology confirming placental dysfunction in a previous pregnancy	Recommend low dosage aspirin if the woman has ≥1 of these high risk factors
Moderate	• First pregnancy • Are 40 years or older at booking • Pregnancy interval of more than 10 years • Body mass index (BMI) of 35kg/m² or more at first visit • Family history of preeclampsia in a first degree relative • Multiple pregnancy	Consider aspirin if the woman has two or more

There are a few absolute contraindications to aspirin therapy[67]. Women with a history of aspirin allergy (for example, urticaria) or hypersensitivity to other salicylates are at risk of anaphylaxis and should not receive aspirin. There is significant cross-sensitivity between aspirin and other nonsteroidal (NSAIDS) drugs, thus aspirin is contraindicated in women with known hypersensitivity to NSAIDs. Relative contraindications to aspirin include a history of gastrointestinal bleeding, active peptic ulcer disease, other sources of gastrointestinal or genitourinary bleeding, and severe hepatic dysfunction. The decision to continue aspirin in the presence of obstetric bleeding or risk factors for obstetric bleeding should be considered on a case-by-case basis.

Appendix 2 Belfast Trust risk assessment flowchart for SGA

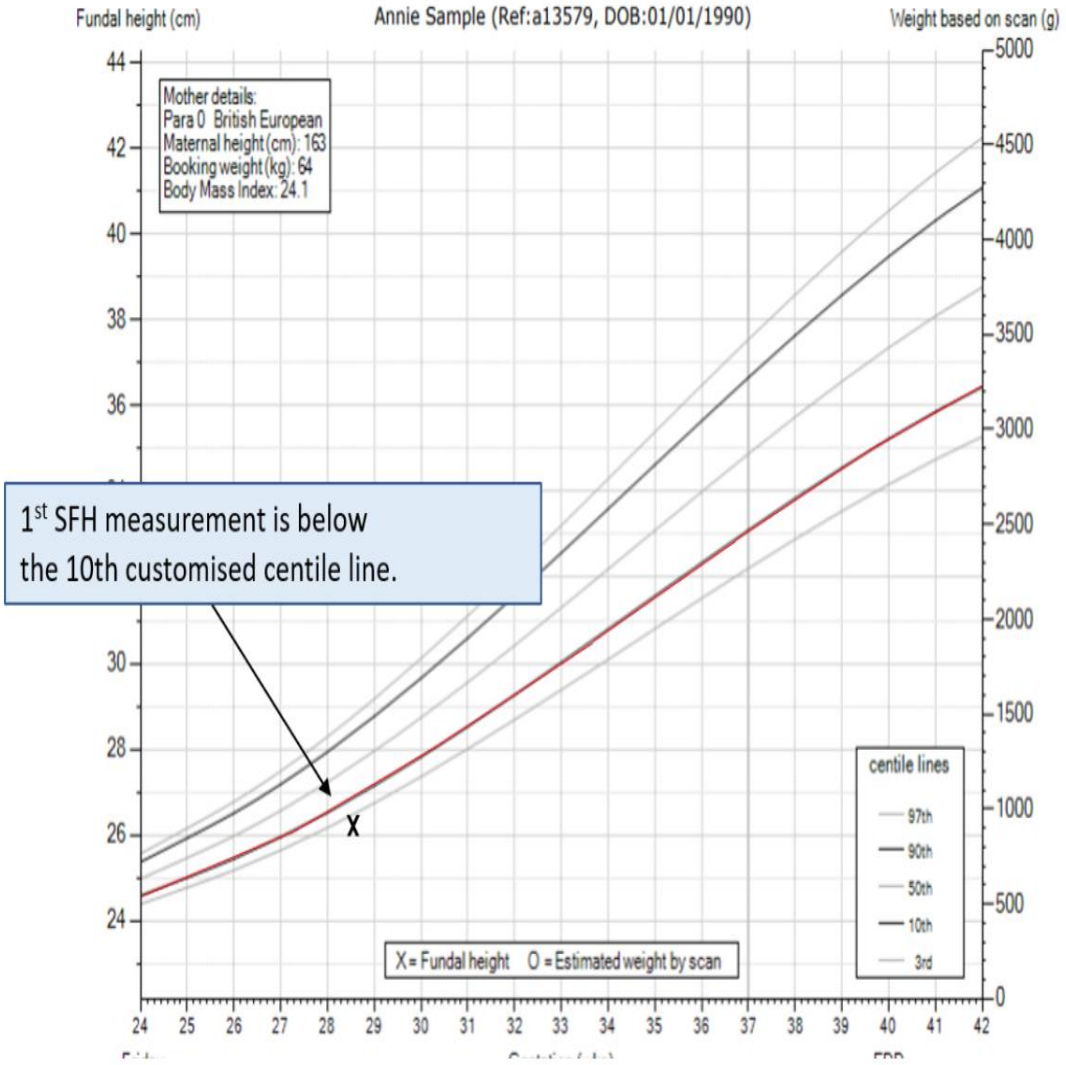


FGR – fetal growth restriction. Weight for gestation <10th centile +/- slow growth or no growth on serial scan +/- abnormal Umbilical A/fetal Doppler
SGA – small for gestational age (includes constitutional and pathological causes)

The factors listed here constitute those routinely assessed at booking. Other risk factors exist and risk assessment must always be individualised taking into account previous medical and obstetric history and current pregnancy history.

Appendix 3
First plot below the 10th centile

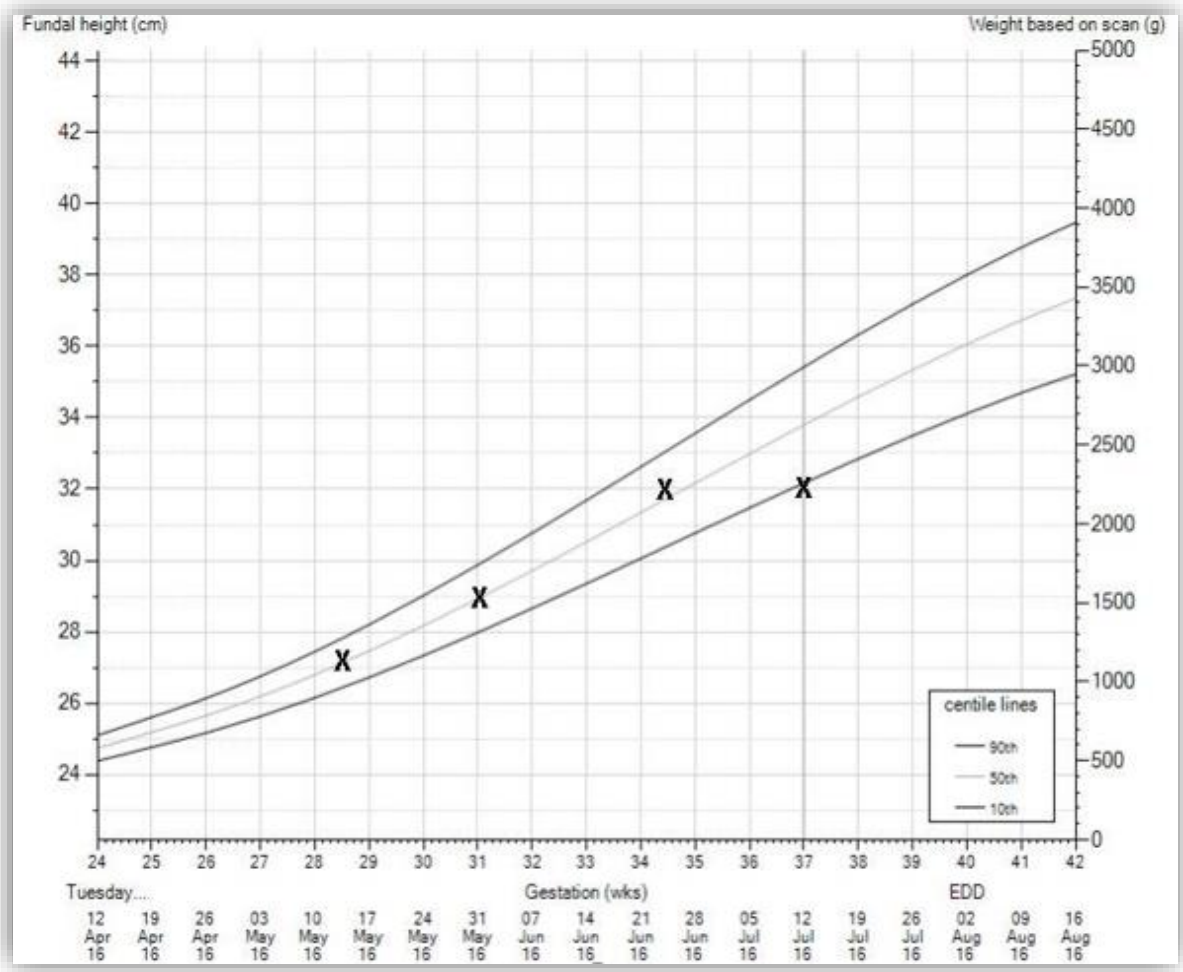
First SFH below the 10th centile



A first SFH measurement below the 10th centile MAY be an indication of SGA and of potential concern as a single measurement cannot reassure that the growth rate is normal. Therefore it is an indication for an ultrasound scan to determine the EFW which should be plotted, with further management as set out in the GAP guidance.

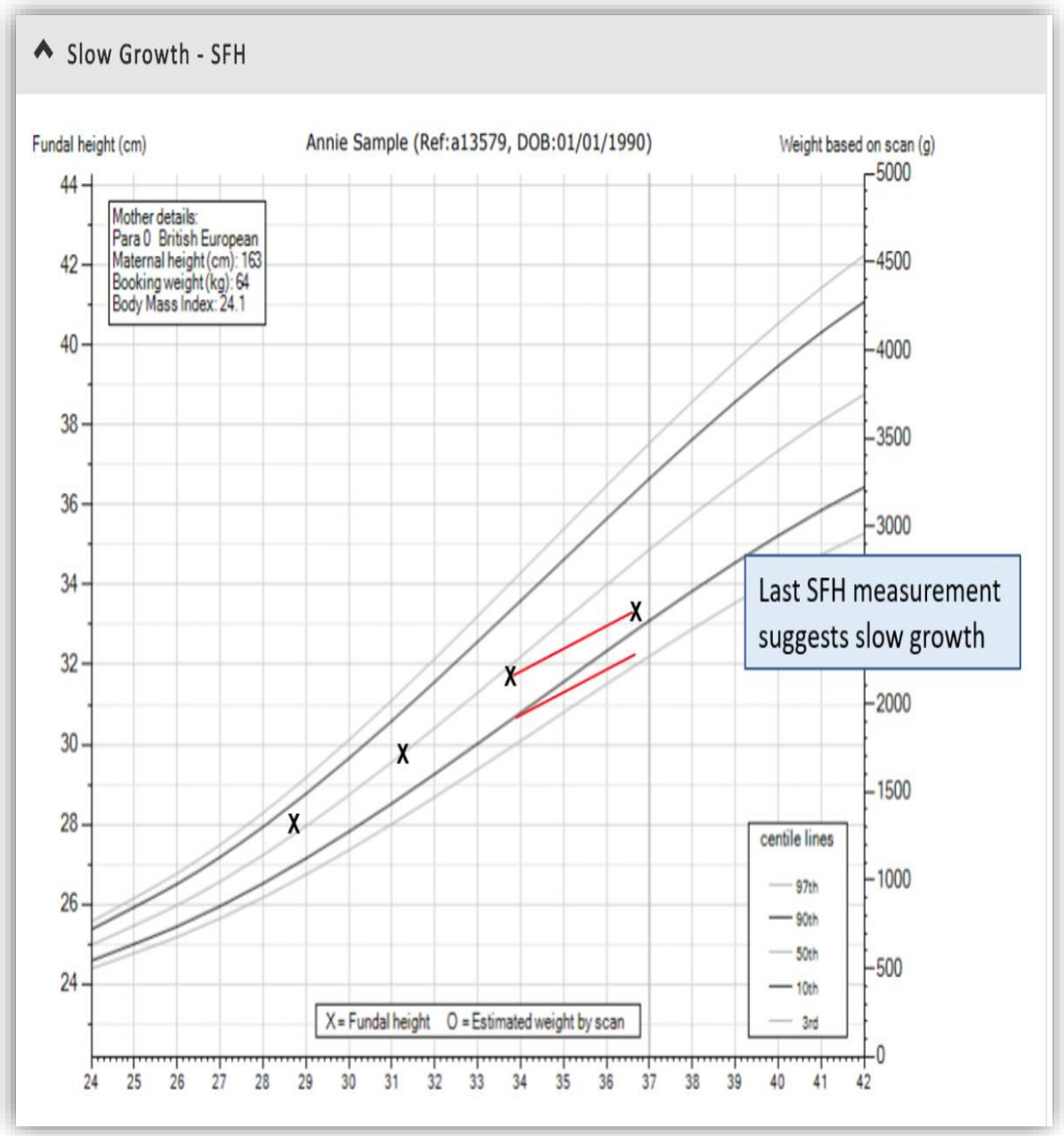
The mother should be told that a fundal height measurement is an assessment of the uterus and its contents, while a scan will be able to estimate the baby's weight.

Appendix 4
Static growth example



In this example, the measurement is identical in two measurements separated by 2 weeks. This would be considered to be an abnormal pattern, and should prompt referral for ultrasound assessment. Static growth has the same significance whether the original measurement is above the 90th centile, on the 50th, or on the 10th centile. The potential impaction is static fetal growth, and possibly also reduced liquor volume, both of which are associated with intrauterine death.

Appendix 5
Slow growth example



Example of SLOW GROWTH suspected from FHM measurements. This is defined as the slope or growth rate between measurements which is slower or flatter than the slope of the 10th centile line over the same gestational age interval, as shown on the graph.

'Slow growth' is an indication for referral for an USS.

Appendix 6
Accelerated or Excessive growth example