NHS
University Hospitals of Derby and Burton
NHS Foundation Trust

Fetal Growth Disorders - Small for Gestational Age (SGA); Fetal Growth Restriction (FGR); Suboptimal growth
Summary Clinical Guideline

Implementation 24th July 2023

Staff managing fetal growth problems should appreciate that small for gestational age (SGA with EFW <10th centile) and Fetal growth restriction (FGR) where a fetus fails to reach its growth potential, are distinct entities. Although SGA babies are at increased risk of FGR compared to appropriately grown fetuses, fetuses <3rd centile are far more likely to be FGR than those between 3rd-10th centile.

Definitions

Fetal Growth disorder: includes SGA; FGR and Suboptimal growth
SGA: EFW/AC or birth weight <10th centile
Suboptimal growth: increase of EFW <280 gram over a period of 14 days (20 grams per day) from 34 weeks or AC/EFW crossing >20 percentiles (e.g. from 70th centile to below the 50th centile)
Fetal growth restriction Pathological restriction of growth potential 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 birth <34 weeks
- Birthweight <10th centile with evidence of placental dysfunction as defined below for current pregnancy

Definition of FGR in a current pregnancy:

Early FGR: Gestational age <32 weeks, in absence of congenital anomalies	**Late FGR:** Gestational age ≥32 weeks, in absence of congenital anomalies
AC/EFW <3rd centile or UA-AEDF	AC/EFW <3rd centile
OR	Or at least two out of three of the following:
AC/EFW <10th centile with either:	1. AC/EFW <10th centile
1. UtA-PI >95th centile and/or	2. AC/EFW crossing centiles >2 quartiles on growth centiles (e.g. from 70th centile to below 20th centile)
2. UA-PI >95th centile	3. MCA/CPR <5th centile or UA-PI >95th centile

Dual processes during phasing out of CRIS / implementing Viewpoint
Viewpoint will be implemented on the 24th of July 2023. Pregnancies where serial growth scans have commenced prior to this date need to remain on the CRIS reporting system for the remainder of the pregnancy. See in red specific guidance.

Intermediate fetal growth monitoring pathway	Intensive fetal growth monitoring pathway
Risk factors for consideration	
• SGA risk (cumulative risk as per risk assessment tool 3 or more) but NOT considered for high risk pathway • Factors identified that may affect SFH accuracy but NOT considered for high risk pathway • Growth concerns in previous pregnancy necessitating delivery, especially prior to 39 weeks, with FGR as per definition in current pregnancy even if EFW/birth weight >10th centile	• Maternal medical conditions (chronic kidney disease, chronic hypertension, autoimmune disease (SLE, APLS), cyanotic congenital heart disease, solid tissue transplant, connective tissue disease) • Previous FGR (see definitions) • Previous severe early onset pre-eclampsia prior to 34 weeks • Previous SGA stillbirth • Low Papp-A <1st centile (0.2 MOM) • Echogenic bowel on anomaly scan • Two vessel cord • EFW < 10th centile on anomaly scan • Heavy bleeding 1st trimester or placental haematoma on USS • Seriously or critically unwell due to confirmed COVID19, requiring hospitalisation, during current pregnancy
Care pathway guidance	
• Aim for 3 growth scans in the 3rd trimester at 30, 34 and 38 weeks gestational age	• Aim to commence growth scans at 26-28 weeks • Aim to scan every 3-4 weeks until delivery

- Aim for scans to be a minimum of 3 weeks apart if there are no concerns to minimise false positive rates for diagnosing FGR
- If a scan is considered less than 3 weeks following a growth scan, a consultant opinion is warranted

Reduced growth velocity

- A drop in growth velocity (EFW or AC) of more than 20 percentiles should prompt a repeat ultrasound scan for biometry in 2 weeks. For those on CRIS, use WHO centiles tables. Drop of EFW of 20 centiles is comparable to approximate growth of 280 grams over 14 days (20 gram per day average) from 34 weeks gestation. Alternatively, EFW may be plotted manually on Intergrowth EFW chart to guide management.

To manage as suspected fetal growth restriction until further assessment made

- A drop in growth velocity (EFW or AC) of more than 2 quartiles (more than 50 percentiles); check full definitions for FGR
- Static growth, defined as minimal change in fetal biometry over at least two weeks

Case discussion with / referral to Fetal Maternal Medicine Centre team

- Raised PI in presence of fetal growth disorder
- Biometric value or EFW on ultrasound <3rd centile including at FASP anomaly scan
- In case of FGR <34 weeks

Mode and timing of Delivery

See below for pregnancies where fetal growth restriction is identified. For other growth disorders follow the links below.

Click here for IOL guideline
Click here for Fetal monitoring in labour guideline