



ANTENATAL CARE

ASSESSMENT OF FETAL GROWTH INCLUDING THE USE OF A CUSTOMISED FETAL GROWTH CHART

BACKGROUND

Fetal growth restriction is associated with stillbirth, neonatal death and perinatal morbidity. Confidential Enquiries (UK) have demonstrated that most stillbirths due to fetal growth restriction are associated with suboptimal care and are potentially avoidable. A recent epidemiological analysis based on the comprehensive West Midlands database has underlines the impact that fetal growth restriction has on stillbirth rates and the significant reduction which can be achieved through antenatal detection of pregnancies at risk.

The charts are used to plot both SFH measurements obtained during clinical examination and following ultrasound examination. They are customised to each individual taking into account the height, weight, ethnicity and parity of the woman. Birth weights of previous children are added to identify previous problems with growth but this does not affect the centiles produced.

AIMS

- To ensure that there is accurate fetal surveillance, through standardised fundal height measurements of low risk women and serial growth scans for high risk women.
- To ensure that serial fundal height measurements are plotted correctly on the customised growth charts.

Key Points

- Every Midwifery Group Practice woman should have a customised growth chart generated at her 24 weeks visit.
- Where growth problems are suspected from fundal height measurements, referral for a growth scan and appropriate further investigations should be undertaken as soon as possible and within 1 week.
- Whenever the Symphysis Fundal Height (SFH) is on or below the 5th centile, ultrasound scanning should be undertaken within 72 hours.
- Where a problem has been identified, referral is indicated to an obstetric / fetal medicine team for discussion and agreement of an appropriate management plan as soon as possible.
- The fundal height growth curve on a customised chart is not a predictor of birth weight but an indicator of when to refer for further investigations.

Process

1. Each woman will have a customised growth chart printed at her 24 week visit and secured in her medical record.
2. The EDD entered into the programme will be the one calculated by the dating ultrasound scan.
3. The chart will automatically show the 10th, 50th and 90th centile line. The 5th and 65th centile must also be chosen so that they appear on the chart.
4. Enter the woman's details into the box in the top left hand corner.

Measuring Fundal Height (SFH)

1. Not all pregnancies are suitable for primary surveillance by fundal height measurement and require ultrasound biometry instead.
2. Women who have been recognised as low risk and under the Midwifery Group Practice model of care shall have serial fundal height measurements undertaken as a primary screening test for fetal wellbeing. These shall be taken at each routine antenatal appointment after 24 weeks gestation until birth.
3. Refer to clinical guideline [Measuring Fundal Height with a Tape Measure](#)
4. The symbols of **X** for fundal height and **O** for EFW should be used to distinguish clearly the 2 separate growth curves which mirror each other when growth is appropriate.
5. Document the fundal height measurement in the grid beneath the growth chart in order to check that the plot is in the correct place.

Referral to Ultrasound

1. Where there is an indication for a growth scan assessment, the midwife will refer directly to the Diagnostic Imaging department (not via a clinic / consultant).
2. Indication for a growth scan are:
 - First fundal height measurement below the 10th centile (preferably at 24 weeks)
 - Static growth: no increase in sequential measurements.
 - Slow growth : curve linking up plots are crossing centiles in a downward direction.

- Excessive growth: curve linking up plots are crossing centiles in an upward direction

NB: a first measurement above the 90th centile is **not** an indication for a growth scan.

If the fetal growth in subsequent SFH measurements continues to grow along the 90th centile with no clinical suspicion of polyhydramnios referral for a scan is not indicated.

A scan is indicated if the growth is on the 90th centile with clinical suspicion of polyhydramnios, or if there was excessive growth on or above the **95th** centile on subsequent measurements.

Referral following a Growth Scan

- If the estimated fetal weight (EFW) plots between the 10th and 90th centile and is following the centile curve and the amniotic fluid volume is normal, the woman should attend her next antenatal appointment as planned.
- If the EFW does not plot within the 10th and 90th centile or is not following a centile curve or there are concerns regarding the amniotic fluid volume or umbilical artery Doppler :
 1. EFW above the 90th centile (or significantly increased growth velocity) sonographer to contact the MGP midwife who will contact the Labour and Birth Suite registrar for a plan of care.
 2. EFW below 10th centile or reduced growth velocity, normal amniotic fluid volume, normal umbilical artery Doppler sonographer to contact the MGP midwife who will contact the orange team Registrar for a plan of care and repeat the scan in 2-3 weeks.
 3. EFW below 10th centile or reduced growth velocity with oligohydramnios and / or abnormal umbilical artery Doppler and / or abnormal middle cerebral artery Doppler: sonographer to contact the MGP midwife who will contact the Labour and Birth Suite Registrar and accompany the woman to the Maternal Fetal Assessment Unit for **immediate** obstetric review.

REFERENCES (STANDARDS)

BMJ Open. Obstetrics and gynaecology. [Association between reduced stillbirth rates in England and regional uptake of accreditation training in customized fetal growth assessment](#).2013;3:e003942 doi:10.1136/bmjopen-2013-003942

RCOG Green Top Guideline Number 31: [The Investigation and Management of the Small-for-gestational-age fetus](#). 2013

National Standards – 1 Clinical care is Guided by Current Best Practice
 Legislation - NIL
 Related Policies – [KEMH Measuring Fundal Height with a Tape Measure](#)
 Other related documents Nil

RESPONSIBILITY

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| Policy Sponsor | Medical Director- OGCCU |
| Initial Endorsement | December 2015 |
| Last Reviewed | |
| Last Amended | |
| Review date | December 2018 |

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