

FETAL GROWTH ASSESSMENT (CLINICAL) IN PREGNANCY

1. AIM

- To ensure standardised symphysis-fundal height (SFH) measurements are performed to assist in the detection of abnormal fetal growth.

2. PATIENT

- Pregnant woman with a singleton pregnancy from 24 weeks gestation with no known fetal anomalies.

3. STAFF

- Medical, midwifery and nursing staff

4. EQUIPMENT

- Disposable tape measure (in centimetres)

5. CLINICAL PRACTICE

- Measure SFH, in centimetres, at each antenatal visit from 24 weeks gestation
- Explain the procedure to the woman and gain verbal consent
- Perform hand hygiene
- Lie the woman in a semi-recumbent position with an empty bladder and legs extended.
- Perform abdominal palpation to enable accurate identification of the uterine fundus
- Before measurement of the SFH, place the tape measure with the centimetres on the underside to reduce bias
- Ensure the tape measure stays in contact with the skin
- Measure the SFH by holding the zero mark of the tape measure at the top of the fundus and measuring along the midline of the uterus to the top of the symphysis pubis
- Document and compare growth since the previous visit
- Refer woman for a growth ultrasound if the SFH is:
 - $\geq 3\text{cm}$ different from her gestational age in weeks OR
 - measurements demonstrate slow or static growth at two consecutive visits
- Review ultrasound and refer to obstetric team if indicated

6. DOCUMENTATION

- Medical record
- Ultrasound referral form
- Antenatal card

7. EDUCATIONAL NOTES

- Static or falling SFH values, measured weekly on more than two occasions, are regarded as signs of restricted growth, irrespective of whether previous observations were close to, above, or below the mean.
- Various measurement techniques can yield different results therefore it is important that clinicians be consistent in their measurement technique.

FETAL GROWTH ASSESSMENT (CLINICAL) IN PREGNANCY cont'd

- A full bladder can lift the uterus up and would therefore give an inaccurate SFH measurement.
- Legs should be straight otherwise the symphysis pubis moves upwards
- Women in whom measurement of SFH is inaccurate (for example: BMI > 35, large fibroids, polyhydramnios) should be referred for serial growth assessment of fetal size using ultrasound in the third trimester.
- RCOG recommends serial measurement of SFH at each antenatal appointment from 24 weeks of pregnancy as this improves prediction of a Small for Gestational Age (SGA) neonate.
- Research studies have indicated wide ranges of sensitivity of SFH measurement to detect SGA babies yet due to a paucity of evidence to determine whether it is effective/ineffective the Cochrane Review cannot recommend any changes in the continued practice of routine SFH.
- It is important to take into account the woman's perception of fetal growth particularly for multiparous women.
- Serial measurement of SFH and plotting on customized growth charts are now recommended by The National Institute for Health and Care Excellence as well as the Royal College of Obstetricians and Gynecologists in the UK. Observational studies suggest that customised SFH charts (rather than population-based charts) may improve the detection of a SGA neonate and they are also associated with fewer referrals for investigation and fewer admissions. There is debate about this.

8. RELATED POLICIES/ PROCEDURES/GUIDELINES

- Hypertension management in pregnancy
- SESLHD Gestational Diabetes Mellitus Management (GDM) Policy SESLHDPD/282
- SESLHD Management of Pregestational Diabetes in Pregnancy Policy SESLHDPD/283
- ACM Guidelines for consultation and referral
- Obesity and Weight Gain in Pregnancy, Labour and Postpartum

9. RISK RATING

- Low

10. NATIONAL STANDARD

- CC – Comprehensive Care

11. REFERENCES

- RCOG Green-top Guideline No. 31 (2014). The Investigation and Management of the Small for Gestational Age Fetus, 2nd edition. Royal College of Obstetricians and Gynaecologists
- Department of Health (2018) Clinical Practice Guidelines: Pregnancy Care. Canberra: Australian Government Department of Health
- Gaikwad, M (2017) Fundal Height: tape measurement The Joanna Briggs Institute
- NICE Clinical Guideline 62 (2017) Antenatal care for uncomplicated pregnancies. National Institute for Health and Care Excellence, U.K.

FETAL GROWTH ASSESSMENT (CLINICAL) IN PREGNANCY cont'd

- Pay, Aase Serine Devold (2016) Symphysis-fundus measurement and prediction of SGA neonates. Institute of Clinical Medicine, Faculty of Medicine, University of Oslo.
- Robert Peter J, Ho JJ, Valliapan J, Sivasangari S (2015) Symphysial fundal height (SFH) measurement in pregnancy for detecting abnormal fetal growth. The Cochrane Database of Systemic Reviews
- Japaraj RP, Ho JJ, Valliapan J, Sivavangari S. (2012) Symphysial fundal height (SFH) measurement for detecting abnormal fetal growth. Cochrane Database Systemic Review.
- Neilson, J.P. (2006) Symphysis-fundal height measurement in pregnancy. The Cochrane Database of Systemic Reviews
- ACMI national Midwifery Guidelines for Consultation and Referral. 3rd Edition Issue 2 (2013) *Australian College of Midwives Incorporated*, Canberra
- Papageorghiou, A. et al (2016) for the INTERGROWTH-21st Project: International standards for symphysis-fundal height based on serial measurements from the Fetal Growth Longitudinal Study of the: prospective cohort study in eight countries BMJ 2016; 355: i5662: <https://doi.org/10.1136/bmj.i5662>

REVISION & APPROVAL HISTORY

Reviewed and endorsed Maternity Services LOPs 14/8/18
Approved Patient Care Committee 6/12/07
Endorsed Maternity Services Clinical Committee 11/9/07

FOR REVIEW : AUGUST 2023