Mid Essex Hospital Services NHS Trust

REDUCED FETAL MOVEMENTS	CLINICAL GUIDELINES Register No: 06034 Status: Public

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1.0 Purpose

1.1 Most women are familiar with the usual fetal movement pattern of their baby in utero. Women‘s perception of reduced fetal movements should be taken seriously and documented in the woman’s health care records.

1.2 Women should be encouraged to seek midwifery medical advice if there is a significant reduction or change to their baby’s usual pattern of movements.

2.0 Equality and Diversity

2.1 Mid Essex Hospital Services NHS Trust is committed to the provision of a service that is fair, accessible and meets the needs of all individuals.

3.0 Aims of Management of Reduced Fetal Movements

The specific aims are to:

- Ascertain gestation and obstetric history
- Ascertain fetal well-being, reassure the woman and exclude fetal death
- Exclude fetal growth restriction or small for gestational age (SGA) baby
- Delivery as appropriate
- Assure more intensive assessment if appropriate

4.0 Antenatal Management

4.1 The importance of monitoring fetal movements should be discussed at each antenatal appointment from 20 weeks gestation. At the woman’s 16 -18 week antenatal appointment, the midwife should discuss the topic of their baby’s movements during pregnancy using the Tommy’s patient information page from the handheld records. This discussion should be documented in the woman’s handheld records on the ‘Information and discussion’ page; under the sub-heading ‘Fetal movement leaflet’.

4.2 If a woman feels a change in the pattern of fetal movements or cessation of fetal movements she should be advised to contact and attend the Day Assessment Unit (DAU) at Broomfield Hospital.

4.3 There is insufficient evidence to recommend formal fetal movement counting using specific parameters. Women should be advised to be aware of their baby’s individual pattern of movements. Women who are concerned about RFM should not wait until the next day for assessment of fetal wellbeing.

4.4 Where the woman has contacted the midwife over the phone, the midwife should complete the appropriate telephone message proforma (which should be filed in the woman’s lilac

medical folder) and ask the woman to report to the maternity unit for further assessment and auscultation of the fetal heart.

4.5 The midwife taking a call from a woman reporting reduced fetal movements after 28 weeks gestation, should complete both the appropriate telephone message proforma and the 'Checklist for the required management of reduced fetal movements' proforma. The midwife based on DAU should file the completed form in the appropriate black folder and the midwife based at the MLU's should scan the emails to the audit midwife accordingly.

4.6 When a woman presents in a community or hospital setting with RFM, an attempt should be made to auscultate the fetal heart using a handheld Doppler to exclude fetal death.

4.7 If a woman presents in the community setting with no facility to auscultate the fetal heart, she should be referred immediately to the maternity unit for auscultation.

4.8 Women should be reassured that 70% of pregnancies with a single episode of reduced fetal movements are uncomplicated.

4.9 Women should be advised to be aware of their baby's individual pattern of movements. If they are concerned about a reduction in or cessation of fetal movements after 28+0 weeks of gestation, they should contact their maternity unit.

4.11 This information and advice should be documented in the woman's healthcare records in terms of a care pathway for these patients following their initial visit
(Refer to the guideline entitled 'Guideline for maternity record keeping including documentation in handheld records', register number 06036)

4.13 If a low risk woman is attending the Midwife-led Unit for reduced fetal movements on the first occasion and the CTG is found to be suspicious, the woman should attend the DAU, Broomfield where Oxford Sonicare CTG monitoring should be undertaken.

4.14 A relevant history should be undertaken to assess risk factors for intrauterine growth restriction (IUGR) or stillbirth. Midwives and obstetricians should be aware of the potential association of decreased fetal movements with key risk factors such as multiple consultations for RFM, IUGR, small-for-gestational-age (SGA) fetus, hypertension, diabetes, extremes of maternal age, primiparity, smoking, placental insufficiency and congenital malformations, racial/ethnic factors, poor obstetric history i.e. stillbirth and fetal growth restriction, genetic factors and issues with access to care. The following questions should be ascertained:

- Duration of reduced fetal movements - when did the patient last feel the reduced fetal movements date and time
- Absent fetal movements – duration and time

4.15 All clinicians should be aware of the potential association of decreased fetal movements with key risk factors such as fetal growth restriction (FGR), small gestational age (SGA) fetus, placental insufficiency and congenital malformation.

4.16 It is important that full details of the assessment and management are documented. It is also important to record the advice given about follow-up and when/where to present if a further episode of RFM is perceived.

4.17 During the history taking the midwife/obstetrician should check the following:

- 20 week gestational scan and placental localisation
- Until 28 weeks gestation the anterior placenta is associated with the perception of reduced fetal movements

4.18 Baseline observation should be undertaken to include temperature, blood pressure, respirations and pulse.

4.19 As pre-eclampsia is associated with placental dysfunction, the woman's blood pressure should be measured and urine tested for proteinuria.

4.20 Following an abdominal palpation, including the symphysis fundal height (SFH) which should be correlated with the gestational age, an auscultation with a pinnard or hand held Doppler should ensue. Subsequently, a cardiotocograph (CTG) should be performed for at least 30 minutes, using a CTG monitor that records fetal movements.
(Refer to the guideline entitled 'Abdominal palpation and examination in pregnancy' register number 07043)

4.21 If the criteria for a normal CTG are met the duration could range between 20, 60, or 90 minutes, the midwife should adhere to the following criteria:

- Baseline: 100-160 beats per minute (bpm)
- Variability: 5-25 bpm
- No decelerations
- Accelerations with fetal movements

If the above criteria have not been met, the patient should be monitored on the Oxford Sonicare CTG.

4.22 If the criteria have been met via the Oxford Sonicare CTG, the monitoring can be discontinued. However, if the criteria has not been met the Oxford Sonicare CTG should be continued for a period of 60 minutes, then stopped and printed for review by the obstetric registrar/ consultant on call
(Refer to the guideline entitled; 'Fetal heart rate monitoring in pregnancy and labour' 4.3; register number 04265.

4.23 If the CTG is suspicious or pathological, the Obstetric Registrar /Consultant on call should be contacted to review the woman and CTG; who will then determine further action in the form of an individual plan of care for the woman.

4.24 A normal CTG in association with an active fetus carries a very high likelihood of normality and women can be reassured. However, a normal CTG has limitations as it only indicates normality at the time of the monitoring.

4.25 Once it is clear that the patient does not have reduced fetal movements, there are no other risk factors for stillbirth and there is a normal CTG, the woman can be reassured that 70% of pregnancies where there has been a single episode of reduced fetal movements are uncomplicated and the woman can be sent home without a medical review at the first visit.

5.0 Subsequent Management in Patients who Present Recurrently with Reduced Fetal Movements (RFM)

5.1 Women whom present on two or more occasions with reduced fetal movements are at increased risk of a poor perinatal outcome. Women who present on a second visit for reduced fetal movements or subsequent visits thereafter should be reviewed by an obstetric registrar/ consultant on call. A CTG should be performed supplemented by further investigations.
(Refer to point 4.7 to 4.9)

5.2 Women who present with a second episode of reduced fetal movement can have a CTG performed at the low risk unit either at WJC, Braintree or St Peters, Malden. Women can then be booked for a fetal ultrasound scan (USS); on the next available date by the midwife. Following the USS the woman can be reviewed by the obstetric team in the Day Assessment Unit (DAU) at Broomfield Hospital.

5.3 Following the CTG monitoring and the USS both being normal and in absence of maternal or fetal risk factors; the episode closes i.e. if this woman subsequently presents with further episodes of reduced fetal movements later on in pregnancy, a fresh pathway begins: CTG monitoring twice and follow-ups.

5.4 When a woman presents recurrently with reduced fetal movements the following plan should be adhered to:

- Exclude predisposing causes
- Ultrasound assessment every 2 weeks
  (include assessment of abdominal circumference and/or estimated fetal weight to detect the SGA fetus, and the assessment of amniotic fluid volume)
- Oxford Sonicare CTG 3 times a week
- Obstetric Consultant review conducted and plan of care documented in the woman's healthcare records

5.5 The woman should be seen by her Obstetric Consultant Team in the Antenatal Clinic.

6.0 Management of Patients who present with Reduced Fetal Movements before 24 weeks Gestation

6.1 If a woman presents with reduced fetal movements prior to 24 weeks and 0 days gestation, the presence of a fetal heart rate should be confirmed by the midwife by auscultation with a Doppler handheld device.

6.2 If fetal movements have never been felt by 24 weeks of gestation, referral to a specialist fetal medicine unit should be considered to look for evidence of fetal neuromuscular conditions. A routine antenatal check-up should be carried out, including listening to the fetal heart.

7.0 Management of patients who Present with Reduced Fetal Movements after 24 weeks to 28 weeks Gestation

7.1.1 If a woman presents with reduced fetal movements between 24 weeks and 0 days and 28 weeks and 0 days of gestation, the presence of a fetal heartbeat should be confirmed by auscultation with a Doppler handheld device. The fetal heartbeat should be confirmed to check fetal viability.

7.2 The woman's history should include a comprehensive still birth risk evaluation; to include fetal growth restriction (FGR), hypertension, diabetes, extremes of maternal age, smoking, primiparity, placental insufficiency, congenital malformation, obesity, racial/ethnic factors, poor past obstetric history (FGR and stillbirth), genetic factors and issues with access to care.

7.3 If a woman presents with reduced fetal movements between 26 weeks and 0 days and 28 weeks and 0 days an Oxford Sonicare CTG can be performed.

8.0 Management of patients who Present with Reduced Fetal Movements after 28 weeks Gestation

(Refer to Appendix A)

8.1 Ultrasound scan assessment should be undertaken as part of the preliminary investigations of a woman presenting with RFM after 28 weeks and 0 days gestation if the perception of RFM persists despite a normal CTG; or if there are any additional risk factors for fetal growth retardation.

8.2 The decision whether or not to induce labour at term in a woman who presents recurrently with reduced fetal movements when the growth, liquor volume and CTG appear normal must be made after careful Consultant-led counseling of the pros and cons of induction on an individualized basis.

8.3 After fetal viability has been confirmed and the woman's history confirms a decrease in fetal movements, arrangements should be made for the woman to have a CTG to exclude fetal compromise if the pregnancy is over 28 weeks and 0 days gestation.

9.0 Clinical Suspicion of an SGA (Small for Gestational Age) or IUGR (Intra Uterine Growth Retardation) Baby

9.1 If there is a clinical suspicion of an SGA or IUGR baby an ultrasound biometry should be booked by the obstetrician following an initial review by the obstetric registrar/ consultant on call.

9.2 A customized fundal height chart is recommended for the management of small for gestational age fetus.

10.0 Criteria for Performing an Ultrasound Scan

10.1 Criteria for performing an ultrasound scan:

- CTG criteria not met either by CTG or Oxford Sonicare CTG
- Suspected SGA/ IUGR baby
- Patient continues to perceive reduced fetal movements
- Any other risk factor identified i.e. previous stillbirth

10.2 An ultrasound scan is required within 24 hours or at the earliest working day.
(Do not request a repeat growth scan measurements within 14 days of a previous test).

11.0 Staffing and Training

11.1 All qualified midwifery and obstetric staff should be fully trained at CTG interpretation as this skill is carried out on a daily basis. All midwifery and obstetric staff must attend yearly statutory training and further updates are mandatory every six months.
(Refer to the guideline entitled 'Mandatory training for Maternity Services (incorporating training needs analysis' register number 09062))

11.2 It is important that full details of assessment and management are documented. It is also important to record the advice given about follow-up and when/where to present if a further episode of reduced fetal movements is perceived.
Refer to the guideline entitled 'Maternity record keeping including documentation in handheld records'; register number 06036)

12.0 Professional Midwifery Advocates

12.1 Professional Midwifery Advocates provide a mechanism of support and guidance to women and midwives. Professional Midwifery Advocates are experienced practising midwives who have undertaken further education in order to supervise midwifery services and to advise and support midwives and women in their care choices.

13.0 Infection Prevention

13.1 All staff should ensure that they follow Trust guideline on infection prevention by washing their hands before and after each examination.

13.2 All staff should ensure that they follow Trust guidelines on infection prevention. All invasive devices must be inserted and cared for using High Impact Intervention guidelines to reduce the risk of infection and deliver safe care. This care should be recorded in the Saving Lives High Impact Intervention Monitoring Tool Paperwork (Medical Devices).

14.0 Audit and Monitoring

14.1 Audit of compliance with this guideline will be considered on an annual audit basis in accordance with the Clinical Audit Strategy and Policy and the Maternity annual audit work plan. The Women's and Children's Clinical Audit Group Audit Lead will identify a lead for the audit.

14.2 The findings of the audit will be reported to and approved by the Women's and Children's Clinical Audit Group and an action plan with named leads and timescales will be developed to address any identified deficiencies. Performance against the action plan will be monitored by this group at subsequent meetings.

14.3 The Women's and Children's Clinical Audit Group report will be reported to the Women's and Children's Directorate Governance Meeting and significant concerns relating to compliance will be entered on the local Risk Assurance Framework.

14.4 Key findings and learning points from the audit will be submitted to the Patient Safety Group within the integrated learning report.

14.5 Key findings and learning points will be disseminated to relevant staff.

15.0 Guideline Management

15.1 As an integral part of the knowledge, skills framework, staff are appraised annually to ensure competency in computer skills and the ability to access the current approved guidelines via the Trust's intranet site.

15.2 Quarterly memos are sent to line managers to disseminate to their staff the most currently approved guidelines available via the intranet and clinical guideline folders, located in each designated clinical area.

15.3 Guideline monitors have been nominated to each clinical area to ensure a system whereby obsolete guidelines are archived and newly approved guidelines are now downloaded from the intranet and filed appropriately in the guideline folders. 'Spot checks' are performed on all clinical guidelines quarterly.

15.4 Quarterly Clinical Practices group meetings are held to discuss 'guidelines'. During this meeting the practice development midwife can highlight any areas for future training needs will be met using methods such as 'workshops' or to be included in future 'skills and drills' mandatory training sessions.

16.0 Communication

16.1 A quarterly 'maternity newsletter' is issued to all staff with embedded icons to highlight key changes in clinical practice to include a list of newly approved guidelines for staff to acknowledge and familiarise themselves with and practice accordingly. Midwives that are on maternity leave or 'bank' staff have letters sent to their home address to update them on current clinical changes.

16.2 Approved guidelines are published monthly in the Trust's Staff Focus that is sent via email to all staff.

16.3 Approved guidelines will be disseminated to appropriate staff quarterly via email.

16.4 Regular memos are posted on the 'Risk Management' notice boards in each clinical area to notify staff of the latest revised guidelines and how to access guidelines via the intranet or clinical guideline folders.

17.0 References

Royal College of Obstetricians and Gynaecologists (2011) Reduced fetal movements. RCOG: Green Top Guideline 57; February.

National Institute of Clinical Excelllence (2017) Antenatal care for uncomplicated pregnancies. CG62; Published March 2008 (Updated January 2017)

Knight, M et al, 2016. Saving Lives, Improving Mothers' Care Surveillance of maternal deaths in the UK 2012–14 and lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2009–14. London: Maternal, Newborn and Infant Clinical Outcome Review Programme,

Appendix A

Reduced Fetal Movements in Pregnancy over 28 weeks gestation