ROYAL HOSPITAL FOR WOMEN Approved by
LOCAL OPERATING PROCEDURES Quality & Patient Safety Committee
CLINICAL POLICIES, PROCEDURES & GUIDELINES MANUAL 21/7/11

FETAL MOVEMENTS – Identification and Management of Reduced Patterns

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM

- Compromised fetus is identified and appropriately monitored and managed
- Woman is aware of normal fetal movement (FM) patterns
- Woman is aware of when and whom to contact if she is concerned about FM patterns

2. PATIENT

- Woman greater than 20 weeks pregnant

3. STAFF

- Registered Midwives
- Student Midwives under supervision
- Medical Staff

4. EQUIPMENT

- Cardiotocograph (CTG)
- Doppler
- Ultrasound

5. CLINICAL PRACTICE

- Enquire at each antenatal visit from 20 weeks with regard to the pattern of FMs
- Educate woman regarding normal FMs :
  - a minimum of 10 movements in a 2 hour period when the fetus would normally be active after 24 weeks gestation[2]
  - these will be experienced more if she is recumbent and focussing on her baby
  - and any reduction in normal movements for her own baby
- Encourage woman to contact hospital or midwife **THE SAME DAY** if she is concerned about FMs
- Ensure woman is aware of how to contact the hospital or her midwife if she has any concerns about FM patterns
- Recommend further monitoring and assessment in hospital if :
  - No FM felt at all by 24 weeks
  - Decreased FMs >24 weeks gestation after the woman has monitored movements as defined above : review within 12 hours
  - Woman has ongoing concerns regarding FMs
- Monitoring and assessment for all women should include a history and clinical examination evaluating risk factors for stillbirth

Monitoring

20 – 24 weeks gestation	Listen to fetal heart with hand held Doppler, reassure woman the fetal heart is present. Advise woman if she has anterior placenta she may be less aware of fetal movements. If fetal heart is not present organise formal ultrasound scan
24 – 28 weeks gestation	Listen to fetal heart with hand held Doppler and organise ultrasound
>28 weeks gestation	CTG and ultrasound scan to assess amniotic fluid volume, fetal anatomy and growth should be performed if the perception of reduced fetal movements persists despite a normal CTG, or there are any other additional risk factors for stillbirth. The ultrasound should be performed when next available- within 24 hours

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FETAL MOVEMENTS – Identification and Management of Reduced Patterns cont'd

- Discuss all women with medical officer after assessment
- Consider vibro-acoustic stimulation
- Discuss timing of delivery with consultant if reduced fetal movement at term (>37 weeks gestation)
- Document discussion and advice provided
- Pay particular attention to woman who present with recurrent decreased fetal movements and discuss their case with the consultant

6. DOCUMENTATION

- Antenatal card
- Integrated clinical notes
- Delivery Suite telephone call book or Midwifery Group Practice diaries

7. EDUCATIONAL NOTES

- Women with decreased FM in the two hour period when the fetus is normally active have a ten-fold increase in fetal death[2]
- FM's are related to neuromuscular development and a normal metabolic state of the central nervous system, and are therefore considered as an expression of fetal wellbeing
- Reduced FMs are predictive of perinatal mortality.[1] Monitoring over a two hour period when the fetus is normally active has been shown to be more reliable than over a longer period[2]
- Use of FM charts (kick charts) has not been shown to reduce adverse outcomes but may still be offered in some circumstances[1,3]
- Women having their first baby generally experience FM's around 20 weeks. With a subsequent pregnancy movements may be felt earlier[4]
- Factors thought to alter a woman's perception of FM's include :
  - the presence of an anterior placenta
  - an increased Body Mass Index (BMI)
  - a busy mother
  - sedative medications
  - alcohol
  - corticosteroids
  - intra-uterine growth restriction
  - fetal anaemia
  - polyhydramnios
  - oligohydramnios
- Clinical history of risk factors for stillbirth include :
  - multiple presentations for decreased fetal movements
  - known IUGR
  - hypertension
  - diabetes
  - extremes of maternal age
  - primiparity
  - smoking
  - placental insufficiency
  - congenital malformation
  - obesity
  - poor past obstetric history (stillbirth, IUGR), genetic factors and issues with access to care
- Women with recurrent decreased fetal movements on >=2 occasions are at greater risk of poor perinatal outcome (stillbirth, preterm birth or fetal growth restriction OR 1.92 95% CI 1.21-3.02) compared to women who only present once. There are no studies determining whether intervention such as delivery or further investigation alters perinatal mortality or morbidity

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8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- Fetal Growth Assessment in Pregnancy
- Cardiotocography (CTG) – Antenatal
- Antenatal Visits Schedule for Women with Low Risk Pregnancy
- Obesity in Pregnancy, Labour and Postpartum
- ACM Guidelines

9. REFERENCES

1 Froen,J. 2004 A kick from within- FM counting and the cancelled progress of antenatal care. Journal of Perinatal Medicine 32 : 13-24

2 Holm Tveit JV, Saastad E, Stray-Pedersen B, Bordahl PE, Flenady V, Fretts R, Froen JF. 2009 Reduction of late stillbirth with the introduction of FM information and guidelines – a clinical quality improvement. BMC Pregnancy and Childbirth 2009

3 NSW Health, 2006 Fetal Welfare, Obstetric Emergency, Neonatal Resuscitation (FONT)

4 Pairman, S., Pincombe, J., Thorogoodc & Tracy, S. 2006 Midwifery; Preparation for practice. Churchill Livingstone, Sydney

5 RCOG greentop guideline 57, 2011