DECREASED FETAL MOVEMENTS: MATERNAL FETAL ASSESSMENT UNIT – QUICK REFERENCE GUIDE

AIM

• Provide a QRG for the appropriate management of a woman with reduced fetal movements.

CRITERIA FOR REFERRAL

• Reduced fetal movements ≥ 23 weeks should contact MFAU immediately
  ➢ Prior to this gestation it is appropriate for the local health provider to auscultate the fetal heart rate and reassure the woman.

ASSESSMENT

• Note history – e.g. duration/pattern of decreased fetal movements (DFM), maternal lifestyle issues (e.g. Exercise/ smoking), any medication, alcohol or sedating drug use, abnormal abdominal pain, risk factors for stillbirth e.g. diabetes, smoking, obesity, HTN, IUGR, congenital malformation, poor obstetric history.
• Perform baseline maternal observations (T, P, R, BP, SpO2, conscious state) including urinalysis.
• Perform a palpation assessment, including symphysis-fundal height measurement, of fetal size for gestation and amniotic fluid volume, as may indicate fetal growth restriction.
• Assess the fetal heart rate with a dopitone; apply a cardiotocography (CTG) depending on gestation.

ASSESS FETAL WELLBEING

See also Clinical Guideline Antepartum Fetal Heart Rate Monitoring

If gestation is ≥ 32 weeks:

Perform a CTG:
  • Reactive:
    ➢ With no risk factors for stillbirth/growth restriction & perception of DFM resolved: Reassure the woman, notify the obstetric Registrar or above, then discharge home continuing antenatal care with the usual health care provider.
    ➢ With risk factors and/ or DFM remaining present: Arrange an ultrasound (USS) for AFI / AG / EFW.

  • Non-reactive: Arrange urgent Registrar/ Consultant review, and an ultrasound (USS). Assessment should include:
    ➢ Fetal activity, growth and weight
    ➢ Amniotic fluid index (AFI) and umbilical artery (UA) Doppler and / or
    ➢ Biophysical profile score
    ➢ Fetal morphology (if not previously performed)

If gestation is <32 weeks:

• Confirm the fetal heart is present by auscultation, discuss further management with obstetric staff, and arrange for an ultrasound assessment including documentation of fetal activity, AFI
and UA Doppler. The ultrasound should be performed by a sonographer or by a credentialed obstetric Registrar or Consultant.\(^1\)

- If there is to be a significant delay in obtaining an ultrasound (> 1 hour), a CTG should be performed. At the limits of viability (between 23-25 weeks) this should be discussed with a Registrar or Consultant.

If an ultrasound is not performed by a credentialed Registrar / Consultant, a departmental scan should be arranged at a time that is clinically appropriate.

**Ultrasound:**

- If the AFI is normal and
  - Normal UA Doppler and
  - Normal fetal activity on the scan, the woman may go home after discussing with the obstetric Registrar/ Consultant.

- If the AFI is reduced and/or
  - Elevated systolic/diastolic (S/D) ratio and/or
  - Inactive fetus on scan, then commence a CTG and arrange medical review by the obstetric Registrar or above.

- *If the CTG is non-reactive* and the ultrasound is not reassuring then perform a full blood picture, group and hold, and urgent Kleihauer test. Arrange urgent medical review by the obstetric Registrar or above. If the CTG is abnormal and the USS indicates a normally grown fetus, consider testing for fetomaternal haemorrhage.\(^2\)

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### REFERENCES (STANDARDS)


### RESPONSIBILITY

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### FLOW CHART FOR THE MANAGEMENT OF DECREASED FETAL MOVEMENTS

**Woman presents to MFAU at ≥23 weeks with decreased fetal movements (DFM)**

- **Document history** related to decreased fetal movements
- **Assess risks** for stillbirth or IUGR
- **Perform baseline obs:** (T,P,R,BP,SpO₂, conscious state) and urinalysis
- **Palpate** abdomen & measure symphysis fundal height & record
- **Assess FHR** with Dopente

**FHR heard?**

- **YES**
  - **>32 weeks gestation?**
    - **YES**
      - Commence CTG
    - **NO**
      - Is CTG Reactive & non-sinister?
        - **YES**
          - Perceived of DFM resolved and NO risk factors for stillbirth/ IUGR present?
            - **YES**
              - • Reassure
              - • Review by Registrar
              - • Discharge home with follow-up with usual antenatal care provider
            - **NO**
              - **NO**
                - • Investigate fetomaternal haemorrhage if abnormal CTG & normal USS

- **NO**
  - **USS to diagnose / exclude IUFD**
  - **IUFD?**
    - **YES**
      - Discuss with obstetric team and document plan
    - **NO**
      - **Document** history related to decreased fetal movements
      - **Assess** risks for stillbirth or IUGR
      - **Perform** baseline obs: (T,P,R,BP,SpO₂, conscious state) and urinalysis
      - **Palpate** abdomen & measure symphysis fundal height & record
      - **Assess** FHR with Dopente
      - **Is USS normal?**
        - • AFI > 5
        - • Normal UA Doppler and
        - • Fetus active?
          - **YES**
            - • Reassure
            - • Review by Registrar
            - • Discharge home with follow-up with usual antenatal care provider
          - **NO**
            - • Investigate fetomaternal haemorrhage if abnormal CTG & normal USS
      - **Arrange review** by obstetric Registrar or above

**Abbreviations:**
- AFI: Amniotic fluid index; BPP: Biophysical profile; CTG: Cardiotocography;
- DFM: Decreased fetal movements; FBP: Full blood picture;
- FHR: Fetal heart rate; IUFD: Intrauterine fetal death;
- IUGR: Intrauterine growth restriction; MFAU: Maternal fetal assessment unit;
- UA: Umbilical artery; USS: Ultrasound scan;
- Maternal obs: Temp, Pulse, Respirations, Blood pressure, Pulse oximetry

Note: This flowchart represents minimum care. Additional care should be individualised dependent on condition changes & co-morbidities.