Decreased Fetal Movements at Term Gestation

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Maternal perception of fetal activity is a common presentation and complaint in pregnancy. There is no definition of decreased fetal movements (DFM), however we know that women presenting with DFM especially at term are at a higher risk of stillbirth[1]. It is reported that mothers recognise only ~40% of fetal movements at term with a healthy fetus having 4-100 movements per hour[2].

DFM is also strongly linked to adverse perinatal outcomes such as neurodevelopment disability, infection, feto-maternal haemorrhage (FMH), emergency delivery, umbilical cord complications, SGA and IUGR. DFM may also be associated with placental dysfunction, which can lead to fetal growth restriction or still birth[3].

Case Study:

35-year-old, Maria, Gravida 2, Para 1 presented to her GP with her first episode of decreased fetal movements at 38 weeks gestational age. Her first pregnancy resulted in a ventouse assisted vaginal birth of a 3.0kg baby. Her current pregnancy had progressed well with no antenatal issues. She denied feeling unwell, any vaginal loss or bleeding and reported painless tightenings. Her GP took vital signs and performed an abdominal examination. BP was normal at 112/65. Abdomen was palpated as a cephalic presentation with reduced fundal height of 35cm. Fetal heart rate of 145bpm.

When a woman reports DFM, it is important that the woman and fetus be assessed as soon as possible, within 2 hours if movements are absent and within 12 hours if movements are decreased[4].

Maria's GP contacted the delivery ward and Maria went in for further assessment. On review, she reported a one-day history of decreased movements, but otherwise feeling well. She denied any per vaginal loss, abdominal pain, itchiness, contractions. Baseline vital signs were normal and BP 115/70. She examined with a decreased symphysis-fundal height (SFH) representing 35 weeks with soft non-tender abdomen and a cephalic fetal presentation.

Women reporting DFM should be assessed for the presence of other risk factors associated with an increased risk of stillbirth, e.g. Fetal growth restriction, hypertension, diabetes, advanced maternal age, smoking and high BMI[3]. A thorough clinical examination should also include review of fetal lie and symphysis-fundal height measurements.

Maria had a cardiotocography (CTG) which was normal and a quantitative feto-maternal haemorrhage (Kleihauer) blood test was sent. She underwent a growth and wellbeing ultrasound which was reassuring with a fetal estimated weight of 3.1kgs (20%) and an abdominal circumference of 25th centile with normal amniotic fluid index and Doppler's.

A CTG is performed for all decreased fetal movement presentations greater than 26 weeks gestation. Ultrasound scan for fetal biometry, wellbeing and amniotic fluid volume is also a part of the preliminary investigation of these women and should be arranged within 24 hours[3]. Testing for quantitative feto-maternal haemorrhage should be considered as DFM may be the only presenting symptom of feto-maternal haemorrhage, particularly in the presence of an abnormal CTG[5].*
** (Different institutions may vary the earliest gestation at which a CTG is appropriate).*

On further review Maria was still not reassured and reported ongoing DFM. After discussion with an obstetric consultant who reviewed Marias case, she was offered an induction of labour.

In the presence of a normal clinical assessment (including CTG and ultrasound), if maternal concern of DFM persists then senior opinion should be sought and further management should be individualised to the patient[3]. Induction of labour should be considered even in the presence of a normal CTG and ultrasound especially if there are persistent or recurrent episodes of DFM, the woman is post-dates or there are risk factors of still birth[6].

Maria was found to be favourable on vaginal examination and progressed to having a vaginal delivery of a 3.15kg baby. She was discharged from the postnatal ward on day two and followed up with her GP 6 weeks later.

See Safer Baby Bundle website for more information on prevention of stillbirth.

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References

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