Management of Reduced Fetal Movements (RFMs): V1 Final

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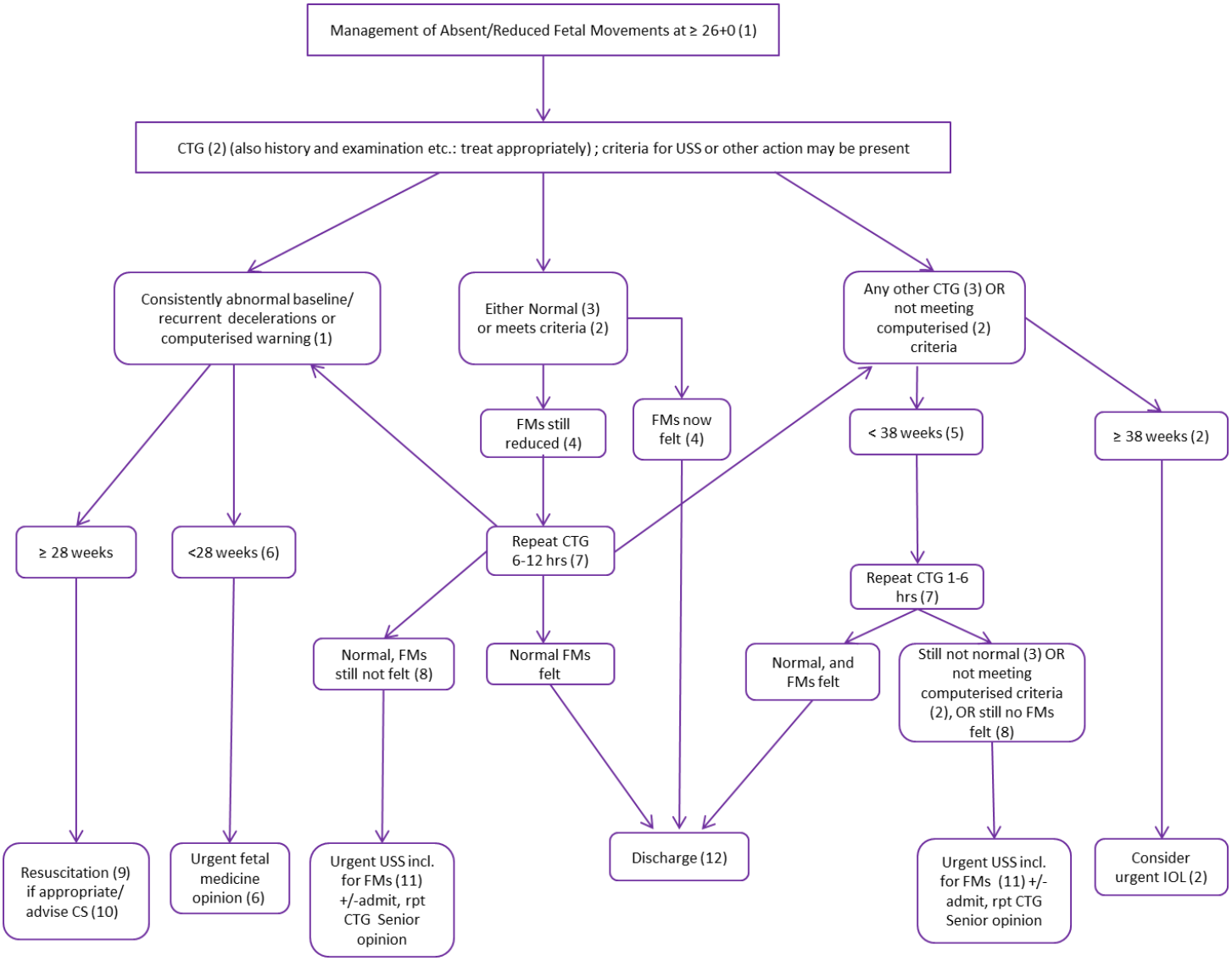
Aims of this guideline:

1. To ensure appropriate identification and management of acutely compromised baby
2. Prevent unnecessary iatrogenic late preterm or early term birth of a non-compromised baby
3. Aid appropriate utilisation of Delivery Suite resources
4. Provide reassurance to staff and women that appropriate action is taken



Notes:

1. Although RCOG guidelines advise use of CTGs from 28+0 weeks, CTGs can be performed from 26+0 weeks
2. Dawes Redman computerised CTG if available. This is advised by national guidelines. Continue until analysis advised, unless pre-terminal. Not meeting computerised CTG criteria is unusual after 38 weeks and often signifies significant compromise.
3. Definitions of normal CTG if not computerised: normal baseline and sleep/ wake cycles with accelerations
4. >75% of women report normal fetal movements once arrived/ CTG started
5. Induction of labour before 38 weeks has the capacity to cause harm to the neonate
6. Serious fetal abnormality and treatable fetal disease (e.g. hydrops, anaemia etc.) may present with reduced fetal movements. In utero transfer should be discussed with an FMU
7. Timing variable.
8. In unwell babies with RFMs the CTG may be the last finding to become abnormal
9. An unwell mother may cause the CTG to be abnormal
10. Induction of labour with a seriously abnormal CTG is inappropriate
11. If Level ≥2 sonographer, can be portable bedside scan. Ultrasound is 1) to determine whether it is perception of, or actual reduced movements, and 2) assess whether there is evidence of fetal growth restriction. Note in an acute situation, a normal CTG is a more reliable test of fetal wellbeing and normal umbilical artery Doppler is not reassuring >34 weeks. Normal movements and biometry should mean no need for admission. Continued, genuine (i.e. not moving on bedside scan) reduced/ absent fetal movements should always be taken seriously. Note that babies may be unwell from non-placental disease e.g. feto-maternal haemorrhage.
12. The outcome for babies with RFMs but who subsequently move normally and with a normal CTG is excellent

Second episodes of RFMS

These must be distinguished from a 'continued' episode (see above).

A continued episode (re-presentation <48 hours without normal movements between) should be managed as above. A senior opinion and, if the CTG is normal, an ultrasound for fetal movements and full biometry preferably incl CPR is advised. A second episode is when there have been normal movements recorded since the last episode, should be managed as above.

Recurrent (but not continuous) RFMs is not strongly associated with adverse outcomes. Ultrasound may not always be indicated particularly if a recent scan has been normal. Induction prior to 38-39 in the absence of other markers of compromise is seldom appropriate.

Checklist for the Management of Reduced Fetal Movements (RFM) (adapted from SVBL2) (7)

1. Ask/look

Confirm there is maternal perception of RFM?

How long has there been RFM?

Is this the first episode?

When were movements last felt?

Are movements now felt?

What is pregnancy risk level?

Is the mother unwell?

2. Act

Auscultate fetal heart to confirm fetal viability.

Perform CTG if >/=26-28weeks; repeat according to guideline above

Assess fetal growth: perform SFH if not performed within last 2 weeks.

Ultrasound scan for movement/ growth according to unit guidelines for fetal growth, liquor volume and umbilical artery

Offer delivery according to guideline above.

3. Advise

Convey results of investigations to the mother. Mother should be encouraged to re-attend urgently if she has continued or further concerns about RFM.

Evidence base concerning management of recurrent RFMs

RFMs can be a presentation of actual or impending fetal demise. The latter is an emergency. Small for gestational age babies are over represented among women with RFMs. This is because placental dysfunction, which can cause SGA, is a major cause of actual or impending fetal demise and RFMs can be a presentation of this.

However, the evidence that recurrent episodes suggest compromise is much poorer. The original RCOG Guidance (1) was based on 1 small series of 160 women with RFMs (2). Analysis of ultrasound findings (3,4) have shown conflicting results despite having overlapping cohorts of women with recurrent RFMs. They do suggest small increases in the risk of ultrasound markers of placental compromise but the level of risk is much less than for most established risk factors. A cohort of 591women from 6 local units with RFMs (5) during a single month estimated that 16% of all pregnancies had multiple episodes. It demonstrated no increase in perinatal risk when comparing women with a single and multiple episodes. The AFFIRM study (6) was a multicentre large RCT evaluating a package of increased awareness and structured management of RFMs. Part of the structured management involved offering induction of labour to women with recurrent RFMs. The trial showed no benefit to the package but a significant increase in neonatal unit admission. This suggests that some of the package was potentially harmful.

Conclusions re:

1. Induction of labour. Prior to 39 weeks, this can increase neonatal and long term morbidity and increase CS rates. The implications on other women because of increased delivery suite activity should be considered. All these are highlighted in SBLV2 (7). The baby with a markedly abnormal CTG should be delivered by CS.
2. Ultrasound. This may detect the SGA baby but umbilical artery Doppler may be normal in an IUGR baby at term. Ultrasound will often not detect other causes of fetal demise eg feto-maternal haemorrhage or sepsis and should not reassure in the presence of an abnormal CTG.

References

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