



C

### Use of Dawes-Redman analyses at 24-26 weeks

#### A. Clinical need

- In general CTG is used in situations where there is the option to deliver immediately to reduce risks for the newborn baby and enhance his or her survival.
- 26 weeks is the conventional limit below which this pattern of care may cease to be useful because the baby is too small or too immature or both to be able to be offered an acceptable chance of survival.
- However as the skills and capabilities of fetomaternal care and neonatal intensive care improve situations do arise where monitoring is considered to be desirable between 24 and 26 weeks.
- In this context it is asked not infrequently whether or not Dawes-Redman analysis can be extended back in selected cases and used to monitor fetuses between 24 and 26 weeks.
- This cannot be recommended as an automatic arrangement for all presentations at this gestational age. However there are some, perhaps atypical presentations, where CTG and computerised analysis can be usefully applied.

#### B. Clinical planning of this type of CTG monitoring

- There are important requirements that need to be satisfied to make this acceptable to the parents and the staff caring for the individual.
  1. Only begin a programme of such monitoring with a detailed plan of care that has been agreed between the parents, the intensive care paediatric staff, and the fetomaternal medicine specialists.
  2. The plan should focus on achieving a safe delivery at any time after the CTG commences.
  3. It should depend on both the maturity and expected size of the baby on delivery by cesarean section. Fetal lung maturation will be routinely promoted before the program begins. In essence the situation needs to be reviewed at least daily by specialist clinicians' midwives and nurses.
  4. An absolute requirement is an intensive care cot is automatically available if needed on a 24-hour basis.

#### C. Applicability of DR-CT 24-26 weeks.

- The current Oxford database of DR CTG comprises 400 pregnancies between 24 and 26 weeks, of which about half meet criteria and half do not
- 'Criteria met' is associated with better outcomes at later gestational ages than if it is not met. But as would be expected, the entire group is biased to a high percentage of abnormal outcomes.
- From this we conclude that Dawes Redman analysis at 24-26 weeks is valid but it is not as precise as when carried out at later gestational ages.

#### D. Summary:

- DR CTG can be used at 24 -26 weeks.
- It needs to be a non-routine planned decision, which involves senior specialists and the parents. This should therefore only be used in units where suitable neonatal facilities are immediately available
- DR Criteria discriminate reasonably between fetuses with better and worse outcomes.

Prof Chris Redman  
Nuffield Department of Reproductive and Women's Health, Oxford.

Prof Manu Vatish  
Professor of Obstetrics

Beth Albert  
Specialist Midwife for Dawes-Redman CTG monitoring