Royal College of Midwives

RCM/RCOG consensus statement

electronic fetal monitoring (EFM)

Royal College of Obstetricians & Gynaecologists

Introduction

Electronic Fetal Monitoring (EFM) is part of the toolkit used by midwives and obstetricians working together during a woman's pregnancy and labour to monitor the fetal heart rate and check for signs of compromise. The results of EFM are often difficult to interpret and should not be used alone to make clinical decisions; EFM is an aid to understanding how well a baby is at a particular moment in time.

The RCM and RCOG support the guidance recently published by NICE[1] that EFM is not routinely recommended for healthy women at low risk of complications in established labour. The fetal heart rate is instead measured intermittently during established labour using a handheld monitor. EFM is most commonly recommended for the woman and her baby where there are complications, such as where a baby is compromised through poor placental function and the baby is growth restricted (NICE, ibid).

As recommended in the latest Each Baby Counts report[2], all women who are apparently at low risk should have an initial formal assessment when they go into labour, irrespective of the place of birth, to determine the most appropriate fetal monitoring method. This will include review of antenatal history, stage and progress in labour, and any signs the baby may not be coping with labour.

NICE guidance on when to switch from intermittent auscultation to EFM should be followed. This requires regular reassessment of risk during labour. The Each Baby Counts report (ibid) states key management decisions during labour should take into account the full picture, including the mother's history, stage and progress in labour, any antenatal risk factors and any other signs the baby may not be coping with labour. For such decisions therefore EFM is considered one part of a complex picture. If a decision is made for a woman in labour to have continuous EFM, the RCM and RCOG recognise the benefits of a 'fresh eyes' approach[3]. This means that a midwife or obstetrician regularly reviews the fetal heart rate trace with a colleague to reinforce good practice and help with decision making.

Background and context

EFM is widely offered throughout UK maternity services to women during pregnancy and labour to evaluate fetal wellbeing. Maternity care in the UK is of high quality and serious complications during labour and birth are rare.

EFM was introduced as a standard part of maternity care in the UK in the 1970s as it was believed that its use would reduce the number of babies harmed through lack of oxygen (hypoxia) during labour and reduce the number of intrapartum deaths.

Subsequent randomised controlled trials have found no evidence to confirm this when use of EFM is compared to high quality intermittent monitoring for all women in labour, regardless of risk[4]. The evidence is clear that without the whole clinical picture EFM is not a definitive test of fetal wellbeing.

National clinical guidance on fetal heart rate monitoring in labour was updated in February 2017 as part of the NICE guideline *Intrapartum care for healthy women and babies*.

The RCM and RCOG endorse the following national guidance from NICE on the use of EFM in the UK:

- Continuous electronic monitoring is not recommended when a woman is healthy, has no significant history of obstetric complications, her current pregnancy has been straightforward and her labour is progressing normally. These women have a low chance of experiencing complications during labour and for them the fetal heart rate should be monitored with a Pinard stethoscope or a hand-held Doppler ultrasound device every 5-15 minutes during established labour.
- Monitoring is recommended for the woman and her baby where there are complications; for example where a baby might be compromised through a complication of placental insufficiency i.e a baby which is growth restricted, or where there are other indications of fetal compromise such as persistent reduced fetal movements or oligohydramnios.

Education and training

The Nursing and Midwifery Council (NMC) sets the standards for pre-registration midwifery education[5]. Midwives must be competent to care for, monitor and support women during pregnancy and labour and monitor the condition of the baby, including intermittent auscultation and EFM. Students, during the course of their programme, undertake a range of learning activities to develop competency in the holistic assessment of the woman and her baby and their knowledge and skill in this area is continuously assessed in clinical practice.

Training in the assessment of fetal wellbeing is a core component of the RCOG curriculum and is part of the MRCOG examination that all obstetrics and gynaecology trainees must pass before they can specialise in obstetrics and gynaecology. Evidence of undertaking training to demonstrate EFM interpretation skills is also a requirement of all O&G trainees to ensure they have the basic understanding of fetal monitoring principles.

Both the NMC and General Medical Council (GMC) codes of conduct[6] [7]require that registrants must keep their knowledge and skills up to date and take part in activities that maintain their competence and performance. This is assessed annually through the appraisal process. They must recognise the limits of their competence and respect the skills, expertise and contributions of colleagues, consulting with them when appropriate and work with them to preserve the safety of those receiving care.

All NHS maternity providers (Trusts and Health Boards) must have an evidenced-based guideline or policy on fetal monitoring which staff working in those organisations are expected to follow. Mandatory training programmes for maternity staff (including student midwives) provided in NHS Trusts and Health Boards commonly include sessions on fetal monitoring and interpretation of the fetal heart rate. This may also be included in the multidisciplinary practical 'skills and drills' training, where the maternity team work together to identify and manage a range of obstetric emergencies[8]. In addition training is provided through regular multi-disciplinary meetings where cases are reviewed and good practice shared.

Midwives, student midwives and obstetricians working in the NHS also have free access to the RCM/RCOG Health Education England e-Learning for Healthcare resource – eFM. This is a resource aimed at improving clinician's use of intrapartum EFM and interpretation of fetal heart rate recordings and subsequent management[9].

References

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Published: July 2017