CTG Fetal Monitoring Audit

A. Arafa, J. Bawazir, M. Tabibi
Department of Obstetrics and Gynaecology, Epsom and St Helier Hospital NHS Trust, Epsom General Hospital, KT18 7EG

Background
The cardiotocograph (CTG) is a well known and accepted tool for assessing foetal wellbeing during labour. It records changes in the foetal heart rate and their relationship to uterine contractions. This hopefully identifies babies becoming hypoxic. Use of CTG is limited to those patients deemed needing further information and a plan is generated based on the findings. This means that the practical use of CTG should be based on the best available evidence implemented by the NICE guidelines and respectively by the local guidelines.

Aims/Objectives
The aim of this audit is:
• To review our current practice in foetal monitoring during labour at Epsom maternity unit
• To assess our compliance of the use of CTG compared with Nice Guidelines and our Local Protocol
• To identify any gaps or incorrect use & practice with any underlying reasons.
• To improve quality of care during labour

Standard
The standards and guidelines that practice was compared against was the local trust and NICE guidelines titled:
Local guidelines- Foetal monitoring in Labour
NICE- Intrapartum Care for Healthy Women and Babies CG190

Methodology
This project was a retrospective, locally based clinical audit. Data was obtained from patient notes and paper audit proforma over a 3 month period to review current practice and assess compliance against local trust and NICE guidelines. The audit was conducted from October to December 2015 with a total of 60 patients. It involved collecting data on:
• Risk assessment for CTG
• CTG interpretation
• Plans following interpretation
• Hourly “fresh eyes” review
• Hourly Maternal pulse
• The use of STAN
• The use of FBS
• Grade of staff reviewing the CTG
• Neonatal Outcome - measured using APGARs and cord gases

Results
All 60 cases followed the NICE guidelines for CTG interpretation. Of those cases, 98% had a risk assessment for continuous CTG monitoring completed. 88% of cases documented a plan following CTG, the remaining 12% was not documented or unknown.

Hourly reviews were conducted in 70%, and maternal pulse was correctly in 88%. The use of FBS was correctly performed in 86% of cases.

Use of STAN was not carried out in any of the cases. Neonatal APGARs was recorded in 95% of cases at 1 minute and 93% of cases at 5 minutes.

Actions and Recommendations
Action: New stickers to be printed.
Recommendation: Stickers to have larger area for recording.
Action: Midwife in charge to supervise hourly review of CTG by 2 people.
Recommendation: Labour ward coordinator/midwife in charge to “control fresh eye” reviews.
Action: Midwives to be informed that in all cases they should record APGAR and cord gases in the patient’s notes.
Recommendation: APGAR and cord gases to be recorded in all cases.

Conclusion
Based on the collected data, areas of good practice were identified as well as areas needing improvement.
All CTG interpretations were in line with NICE guidelines and risk assessment recorded as 98% compliance.
Areas of improvement included plan of action recorded 88%, maternal pulse 88%, “fresh eyes” recorded 88%, STAN machine not used.
The problems identified were the shortage of midwifery staff, locum staff unfamiliar with guidelines and lack of staff training using STAN.