

Adverse outcome in relation to use of STAN

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The fetal monitoring method STAN (cardiotocography [CTG] plus ST waveform analysis of fetal electrocardiogram [ECG]) has been widely introduced after randomized controlled trials with somewhat conflicting results. A Swedish debate around limitations and relation to adverse outcome has created caution in introducing the method. No national registry of neonatal adverse outcome related to labour exists in Sweden. However, negligence in fetal monitoring has been reported to occur in a majority of pregnancies involved in Swedish patient claims. The aim of our study was to investigate adverse cases in relation to intrapartum monitoring using STAN.

Methodology: All cases from Sweden reported to Neoventa Medical from 2000 to 2001 were analysed retrospectively.

Results: In 65% no antenatal known risk factor was present except from duration of pregnancy exceeding 41 weeks (60%). Meconium staining was present in 40% of the cases and in 25%, pyrexia developed during labour. Onset of adverse events occurred during first stage in 65% of the cases.

The absence of ST event was significantly correlated to a length of registration shorter than 100 minutes, absence of variability or unstable heart rate from start of registration, uterine rupture and antenatal brain damage.

Conclusions

Short registration in relation to use of STAN is significantly correlated to adverse outcome.