

## Fetal ECG waveform analysis.

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Fetal ECG waveform analysis as an adjunct to electronic fetal monitoring (EFM) has developed over the last 3 decades. From a multitude of potential parameters, ST waveform analysis has been documented to provide the information required to shift EFM from a screening device to a diagnostic tool that meets the standards of evidence-based medicine. This chapter details the experimental and clinical evolution of the STAN methodology for intrapartum fetal surveillance. Observational data formed the basis for cardiotocograph (CTG) and ST waveform analysis clinical guidelines. Data from two large, randomized controlled trials (6826 cases) are summarized together with the first analysis of the recently completed EU project of 7823 term fetuses monitored as part of the study to introduce ST analysis into clinical practice. The reduction in the incidence of newborns with marked neurological symptoms is supported by these findings. The detection of ST changes allowed earlier and more consistent intervention.