

Assessment of perinatal outcome – analysis of 7 years of STAN usage in normal pregnancies.

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ST analysis as an adjunct to CTG was introduced into clinical praxis in Göteborg in September 2000. Improvements in outcome were noted during the initial 2 years.

Aim: To find to what extent the initial improvements with ST could be maintained.

Methodology: Seven year data analysis of the Gothenburg cohort of pregnancies of >34 weeks gestation entering active labour and assessed to be at low risk and thus delivered at the two low risk units at Mölndal and Östra. The analysis included 48676 deliveries out of which 44333 had cord acid base data available.

Results: From an initial usage of 26% of all deliveries in 2001 at Moelndal, STAN has become part of regular care with 70% being monitored in 2007. Over the last 4 years and 29816 deliveries in Göteborg, only one case has died during the neonatal period after being monitored with CTG+ST, corresponding to the marked reduction noted in perinatal mortality with the 4-year average PNM decreasing from 6.5 to 4.3 (OR 0.66, 0.54-0.82, $p < 0.001$). The overall umbilical cord metabolic acidosis rate ($\text{pH} < 7.05 + \text{BDecf} > 12.0 \text{ mmol/L}$) during the 7-year period was reduced from 0.76% to 0.15% (OR 0.19, 95%CI 0.10-0.38). The figures for Moelndal was a reduction from 0.72% to **0.06%** (0.08; 0.02-0.36).

Conclusions: The risk of a normal pregnancy to result in an asphyxiated newborn have been reduced to a level not previously thought possible.

