

STAN in clinical practice – the outcome of 2 years of regular use in the city of Gothenburg.

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OBJECTIVE: The purpose of this study was to monitor the introduction of the STAN-methodology (Noventa Medical, Moelndal, Sweden).

STUDY DESIGN: This was a prospective observational study covering the total population of deliveries at term during 2 years. Four thousand eight hundred and thirty out of 14,687 term pregnancies were monitored using the STAN S 21 fetal heart monitor and the associated clinical guidelines. Cord artery metabolic acidosis, neonatal outcome, and rates of operative deliveries for fetal distress were assessed.

RESULTS: The annual rate of STAN usage increased from 28.1% to 37.7% and was associated with a significant reduction in metabolic acidosis rate in the total population from 0.76% to 0.44% ($P < .05$). The compliance with the clinical guidelines increased in cases requiring intervention. The rates for moderate/severe hypoxic neonatal encephalopathy were consistently low, 0.55 and 0.68 per 1000 deliveries, respectively, and corresponding to previous findings. The rate of operative delivery did not change during the 2 years in the total population.

CONCLUSION: Increasing STAN usage provided consistent improvements in fetal outcome equalling those noted in the Swedish randomized controlled trial (RCT) without increasing operative interventions for fetal distress.