

# Interobserver agreement in the assessment of intrapartum automated fetal electrocardiography in singleton pregnancies.

Ojala K, Mäkikallio K, Haapsamo M, Ijäs H, Tekay A.  
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**OBJECTIVE:** To study interobserver agreement in the assessment of intrapartum automated fetal electrocardiogram ST interval analysis (STAN).

**DESIGN:** Observational study.

**SETTING:** Labor ward in tertiary level university hospital. Sample. Two hundred (140 reassuring and 60 non-reassuring) STAN recordings on non-selected women with singleton, vertex, term pregnancies were selected from our archive. Samples of 60-min were analysed from the end of each recording, excluding the last 30 min before delivery.

**METHODS:** Three consultants, who had undergone STAN training and had clinical experience in using STAN, reviewed the recordings using cardiotocography (CTG) and ST information with no clinical data. The reviewers were asked to follow STAN guidelines and 1 to classify the CTG as normal, intermediary, abnormal, or preterminal, and 2 to make a clinical decision on labor management.

**MAIN OUTCOME MEASURES:** Interobserver agreement evaluated by weighted kappa ( $\kappa(w)$ ) values and the proportion of agreement.

**RESULTS:** In CTG classification, the interobserver agreement between three observers was moderate ( $\kappa(w)$ , 0.47-0.48). The proportion of agreement was 56-59%. In clinical decision-making,  $\kappa(w)$  values varied from 0.47 to 0.60, and the proportion of agreement was 80-86%.

**CONCLUSIONS:** In non-selected term pregnancies, the interobserver agreement among experienced obstetricians in the classification of CTG and clinical decision-making according to STAN guidelines is moderate at best.