

CONVENTIONAL CTG vs. COMPUTERISED CTG at 28 WEEKS FOR THE PREDICTION OF SGA IN HIGH-RISK PREGNANCIES

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OBJECTIVE: To compare the performance of conventional vs computerized CTG at 27-28 weeks for the prediction of SGA among high-risk pregnancies.

METHODS:

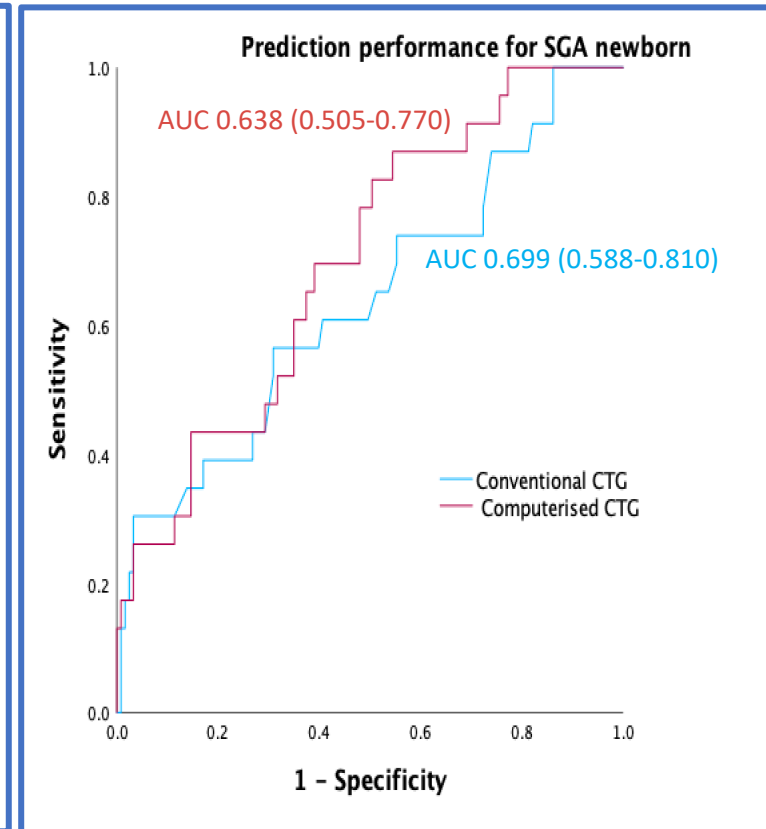
- Prospective observational study.
- High-risk singleton pregnancies defined by RCOG criteria at 2nd trimester US.
- SGA defined as BW <10th centile (local curves reference).
- Exclusion criteria: 27-28 w EFW <10th centile.
- 27⁺⁰-28⁺⁶ w: computerized CTG (c-CTG).
- Compared two models by means of ROC curve and AUC
- MODEL 1: cCTG (Dawes-Redman algorithm): FHR, STV, number of accelerations/decelerations, high and low variability time, total recording time.
- MODEL 2: Conventional CTG: FHR, number of accelerations/decelerations.

RESULTS:

- 146 high-risk pregnancies were included
- 15.7% (n=23) had a SGA newborn.
 - 4.8% (n=7) developed preeclampsia.

| | N=146 |
|--|----------------|
| Mean Maternal Age (years) | 35.2 (SD 5.2) |
| Mean GA at CTG (weeks) | 27.8 (SD 0.5) |
| Mean Gestational Age at Delivery (weeks) | 39.2 (SD 1.6) |
| Mean BW (g) | 3204 (SD 45.6) |
| Median BW centile | 46 (3) |

SGA newborns showed higher basal FHR (bpm) than AGA (145.8 vs 142.8, p=0.04). No differences in STV or other parameters were found.



CONCLUSIONS: Conventional CTG and cCTG at 28 weeks show low performance for the prediction of SGA in high-risk pregnancies.