

## STRATEGIES FOR THE PREDICTION OF SMALL-FOR-GESTATIONAL-AGE (SGA) NEONATES

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**Objectives:** To evaluate different strategies for the prediction of SGA neonates. **Methods:** We evaluated maternal parameters and Uterine Doppler measurement in each trimester. SGA neonates were defined as birth weight 10 centile adjusted by sex and gestational age. A multiparametric model was evaluated for every independent trimester and in a second time as an integrated model. **Results:** 2003 singleton pregnancies were included. The incidence of SGA was 13% (n=261). The mean age was 35 years (SD +/-4.1). The incidence of SGA was higher in nulliparous women (0.16 vs 0.09, p0.05). The gestational age at delivery was lower in the SGA group (38.5 vs 39.2, p0.05). In first trimester evaluation, performed at 12.6 weeks (SD 0.5), SGA group presented significantly lower BMI (21.92 vs 23.04 kg/m<sup>2</sup>, p0) and higher MoM Uterine Doppler (1.05 vs 0.95, p0). At second trimester, 21.1 weeks (SD 0.6), SGA group presented significantly lower weight increase (3.23 vs 3.63 kg, p0) and higher MoM Uterine Doppler (1.02 vs 0.88, p0). At third trimester, 32.5 weeks (SD0.8), SGA group presented significantly lower weight increase (7.95 vs 8.5, p0.005), higher systolic blood pressure (109.7 vs 107.6 mmHg, p0.01) and higher MoM Uterine Doppler (1.12 vs 0.99, p0). Third trimester model performed better with an AUC of 0.69. When we integrated all three trimester's determinations, the performance didn't improve the third trimester model. **Conclusion:** The detection of SGA neonates based on maternal parameters and uterine Doppler is far from being accurate, although the third trimester strategy would perform better.