

Maternal cardiac morphometry of late SGA pregnancies at 6 months after delivery

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Objective. To compare maternal cardiac geometry at 6 months postpartum in a high-risk cohort, based on the development of late SGA.

Materials and Methods. A prospective observational study was conducted among a cohort of high-risk pregnancies of placental dysfunction followed up to 6 months postpartum; maternal cardiac morphometry was compared based on the presence of late SGA irrespective of concomitant Preeclampsia (PE).

Late SGA was defined as a BW below the 10th centile according to local curves. PE definition was based on ISSHP criteria. Parasternal long axis, apical 4-chamber and 5-chamber views were performed.

Mean and standard deviation (SD) were calculated; medians were compared by quantile regression, adjusted by maternal BMI.

Results. 38 patients were included (23 cases *vs* 15 controls). 62.3% women were initially nulliparous. Mean maternal age was 35.6 years (SD 4.6) and mean BMI at 6 months postpartum was 25.7 (SD 4.7) ($p > 0.05$). 60.5% were Caucasian.

Mean end-diastolic (ED) left ventricle (LV) septum thickness and posterior wall thickness were greater, whereas mean ED LV diameter was smaller in the SGA group ($p < 0.05$).

Mean ED and end-systolic (ES) volumes in the left atrium (LA) and LV were smaller among the SGA group. When adjusted by BMI, the differences were statistically significant except for LV and ES LA volume. No differences were found on LV mass.

Conclusions. Mothers with a SGA pregnancy have thicker left ventricular walls and smaller left cavities at 6 months postpartum.