

Clinical features and perinatal outcomes of SGA neonates from pregnancies complicated by diabetes: a multicentre retrospective study

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Objective. The objective of the study was to describe the perinatal outcomes of small-for-gestational age (SGA) neonates from pregnancies complicated by gestational diabetes (GDM) and diabetes mellitus (DM).

Materials and Methods. This was a retrospective multicentre study conducted in three tertiary maternity hospitals. Non-anomalous neonates from singleton pregnancies with a birthweight (BW) below the 10 percentile and from diabetic women were included as cases, while the control group consisted of SGA neonates from non-diabetic women.

A composite adverse perinatal outcome (CAO) was defined in presence of one of the following outcomes: newborn with pH < 7.1, Apgar at 5 min < 7, respiratory support at birth, neonatal hypoglycaemia, neonatal jaundice and admission to

the NICU. The incidence of CAO was compared between the two groups.

Results. Overall, 767 SGA neonates were included in the study, 89 (11.6%) of them from women affected by GDM/DM (case group). In this latter group, a higher maternal BMI at booking (25.8 ± 5.6 vs 22.4 ± 3.8 , $p < 0.001$) and incidence of multiparity (21/34 or 61.8% vs 92/277 or 33.2%, $p = 0.001$) was reported compared to the control group of nondiabetic women.

No statistically significant difference in terms of CAO was found between the two groups.

Conclusions. In this large cohort of neonates with a birthweight < 10th percentile, GDM or DM does not seem to be associated with an increased incidence of adverse perinatal outcome.