

The impact of prenatal risk factors on adverse outcome for babies born large for gestational age



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1. Aim of the Study

To determine independent risk factors for adverse outcome in babies born large for gestational age (LGA).

2. Design of the Study

Retrospective cohort of term singletons with birthweight >90th percentile in Oxford, UK. Outcomes evaluated: stillbirth (SB), severe composite adverse outcome (CAO 1: neonatal death, seizures, severe HIE, therapeutic hypothermia, mechanical ventilation, pH <7), and moderate CAO (CAO 2: 5-min Apgar <7, pH <7.1, NICU admission). Multiple logistic regression was used to calculate ORs and adjusted ORs (aOR) with confidence intervals (CI).

3. Results of the Study

Of 45,469 births, 5,789 (11%) were LGA. The table summarises prenatal factors associated with SB, CAO 1 and CAO 2. After adjustment, nulliparity and non-white ethnicity were associated with SB and CAO 2. CAO 2 was also associated with young age, obesity, hypertension, highest ACGV decile and advanced GA.

4. Conclusions of the Study

The complexity of the interactions such as gestation, labour and other confounding variables makes it difficult to draw definitive conclusions. The mechanism underlying adverse outcomes in LGA babies are likely to be multifactorial and may involve a combination of placental dysfunction and fetal overgrowth as well as the impact of labour

