Session/Poster# Presenter

A21 Molly Schneider
College of Medicine Student

Advisor(s): Dr. Lawrence Fordjour, Pediatrics

Adverse Neonatal Outcomes of Large for Gestational Age Neonates in a Predominantly African- and Caribbean-American population in Central Brooklyn

Background: Large for Gestational Age (LGA) births are associated with increased neonatal and childhood complications including obesity. Understanding the risk factors for and consequences of LGA birth is key to addressing the 22-23% prevalence of childhood obesity in East Flatbush.
Objective: To study the maternal, perinatal, and neonatal factors associated with LGA term births as well as LGA outcomes in a Black, predominantly Afro-Caribbean population in Brooklyn.
Design/Methods: A retrospective chart review of term LGA and Appropriate for Gestational Age (AGA) neonates born at University Hospital from 2018-2021 was conducted. Birthweight (BW) percentiles were corrected for sex and GA using an interactive web application (Aris et al). BW of LGA babies was categorized into 3 groups: 90-95, 95-97 and >97 percentiles. Neonatal and peripartum outcomes were analyzed using one-way ANOVA and Chi square tests.
Results: Of 3991 live births, 2.95% were LGA. LGA neonates were 37% male with a median GA of 39 weeks, median BW of 4178 g, and mean length of hospital stay of 3.3 days. The median maternal weight gain in the last 2 trimesters was 15.39 kg and median BMI at delivery was 36.1. Over 88% of LGA neonates were born to mothers with excessive pregnancy weight gain (> 1 lb/week in last 2 trimesters). Pregnancy complications included gestational diabetes mellitus (11%) and preeclampsia (4.2%). C-section rate was 60% (vs. 30% in AGA babies). Significant neonatal morbidities included respiratory distress (21.2%), hypoglycemia (7.6%), jaundice (10.2%), shoulder dystocia (2.5%). Babies with BW > 97th percentile had higher C-section rate, increased incidence of hypoglycemia requiring IV fluids, and longer hospital stay compared to those in the 90th-97th percentile.
Conclusion(s): This study suggests that LGA babies are at higher risk for complications, and thus necessitates close monitoring of antenatal and pregnancy factors to improve care for at risk population.