

Arab American outcomes of pregnancies complicated by fetal growth restriction

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Abstract

OBJECTIVE: The diagnosis of fetal growth restriction (FGR) is associated with increased fetal morbidity and mortality which drives current antenatal testing guidelines. Traditional growth curves do not account for variability within race or ethnicities. It has been proposed and studied that customized growth charts which consider maternal ethnicity could better differentiate between fetuses with pathologic growth restriction versus those who have reached their growth potential. Arabic ethnicity was not accounted for in these studies. The primary goal of this study was to look at neonatal outcomes of fetuses diagnosed with FGR in the Arab American population and to propose the development of specific growth curves for women of Arab American ethnicity to reduce unnecessary interventions, testing, healthcare cost, and patient anxiety.

METHODS: This study was a retrospective chart review at a large teaching hospital which studied 1258 Arab American pregnancies. The following neonatal outcomes were analyzed; 1 minute APGAR, umbilical artery pH, fetal hypoglycemia, and sepsis.

RESULTS: No statistically significant difference was noted in the neonatal outcomes between the FGR neonates compared to control neonates. Control neonates were less likely to stay in the NICU and had higher 5-minute APGAR scores. Only 0.05% of FGR fetuses had abnormal Dopplers at any point during the pregnancy.

CONCLUSION: The neonatal outcomes for these FGR fetuses were similar to normally grown fetuses. This supports the hypothesis that growth restriction curves based on ethnicity could benefit the patient as certain ethnicities may consistently have smaller fetuses for constitutional reasons and not pathologic reasons. Continued research should be pursued to create growth curves based on ethnicity to more accurately diagnose FGR.