To what extent do growth abnormalities increase the risk of stillbirth near term in pregnancies complicated by diabetes?

In pregnancies complicated by pregestational diabetes mellitus (PG-DM) or gestational diabetes mellitus (GDM), stillbirth risk was increased in fetuses that were large for gestational age (LGA) or small for gestational age (SGA) as compared with fetuses that were appropriate for gestational age (AGA), according to a retrospective cohort study. The highest conditional stillbirth rate occurred in pregnancies with PG-DM and LGA fetuses at 39 weeks’ gestation, and these pregnancies had a 21-times higher relative risk of stillbirth compared with pregnancies with GDM and AGA fetuses (the lowest-risk group) at 37 and 38 weeks’ gestation.

EXPERT COMMENTARY

Nigel Madden, MD, is a Maternal-Fetal Medicine Fellow at Northwestern University Feinberg School of Medicine, Chicago, Illinois. Michelle A. Kominiarek, MD, MS, is an Associate Professor of Obstetrics and Gynecology, Division of Maternal-Fetal Medicine, at Northwestern University Feinberg School of Medicine, Chicago.

Stillbirth is defined as intrauterine demise at or beyond 20 weeks’ gestation. Pregestational DM and GDM significantly increase the risk of stillbirth. Both fetal growth restriction and macrosomia are common complications of pregnancies affected by diabetes, and they further increase the risk of stillbirth. While maternal variables such as glycemic control and medication requirement are currently used to assess the risks of expectant management and inform delivery timing, abnormal fetal growth is not.

Investigators sought to evaluate the stillbirth rates per week of expectant management during the late third trimester stratified by birth weight (as a surrogate for fetal growth) in pregnancies complicated by PG-DM or GDM.

Details of the study

McElwee and colleagues used the US National Vital Statistics System to identify nonanomalous singleton pregnancies complicated by PG-DM or GDM from 2014 to 2017.¹ Pregnanences were stratified by birth weight and categorized as being LGA (birth weight > 90th percentile for gestational age), SGA (birth weight < 10th percentile for gestational age),...
Significant limitations must be considered before generalizing these study results. Notably, the quality of evidence is not sufficient to universally alter delivery timing guidelines in this population. We recommend individual assessment of each clinical scenario when making these decisions.

NIGEL MADDEN, MD; MICHELLE A. KOMINIAREK, MD, MS

References