Fetal macrosomia greater than or equal to 4000 grams. Comparing maternal and neonatal outcomes in diabetic and non-diabetic women

To the Editor

I appreciate the heavy work conducted by Dr. Saleh and all his colleagues in their recent paper. There has been a rise in the prevalence of large newborns over a few decades in many parts of the world. In current obstetrics, the macrosomic fetus represents a frequent clinical challenge. Various studies have shown a significant increase in the frequency of complications in the course of pregnancy, and delivery of macrosomic newborns. Though macrosomia is characteristic in newborns delivered to diabetic women particularly those who are poorly controlled, other factors are nowadays proved to be associated with the delivery of macrosomic newborns in non-diabetic women, namely, obesity, tall stature, multiparty, excessive weight gain during gestation, delivery of previous macrosomic baby, prolonged gestation, and older aged women. The authors did well in comparing various characteristics related to the period of gestation and labor between diabetic, and non-diabetic women who delivered macrosomic newborns. They stated that there were significantly on average older aged women, more multiparous women (≥4), heavier weights at conception and at delivery, and more likely to have chronic hypertension in the diabetic group compared to the non-diabetic group. There was also significantly on average higher gestational age at delivery and taller height in the non-diabetic group compared to the diabetic group. Moreover, there were no significant differences between either group in maternal weight gain during pregnancy, history of previous delivery of birth weight ≥4000 grams, and previous history of one lower segment cesarean delivery. The net result was presence of 4 risk factors in the diabetic group in comparison with 2 risk factors in the non-diabetic group that favor delivery of macrosomic newborns as shown in Table 1 of their results. Despite that, there was as the authors addressed significantly more macrosomic newborns in the non-diabetic group (73%) in comparison with the diabetic group (27%). The authors did not present any explanation for that.

Mabhood D. Al-Mendalawi
Department of Pediatrics
Al-Kindy College of Medicine
Baghdad University
Baghdad, Iraq

Reply from the Author

We thank Dr. Al-Mendalawi for his letter and inquiry. The risk factors for fetal macrosomia are as you mentioned in your letter, which can be presented in diabetic and non-diabetic women. Since we have a diabetic clinic in conjunction with our antenatal clinic, the incidence of macrosomic baby in our center is lower than that in non-diabetic women. That helps us with early diagnosis, and close follow up of gestational diabetic, and true diabetic women. However, other risk factors could not be controlled in our study.

Ahmed Saleh
Department of Obstetrics and Gynecology
Riyadh Military Hospital
Riyadh, Kingdom of Saudi Arabia

References