

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 colleagues¹ 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.² Various studies have shown a significant increase in the frequency of complications in the course of pregnancy, and delivery of macrosomic newborns.³⁻⁷ Though macrosomia is characteristic in newborns delivered to diabetic women particularly those who are poorly controlled,⁸ other factors are nowadays proved to be associated with the delivery of macrosomic newborns in non-diabetic women, namely, obesity, tall stature, multiparity, excessive weight gain during gestation, delivery of previous macrosomic baby, prolonged gestation, and older aged women.⁹⁻¹¹ 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.

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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.

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