

Macrosomia in Newborns of Diabetic Mothers Still a Valid End -Point ...or Is It?

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Abstract

Hyperglycaemia is one factor among several other maternal and fetal determinants of neonatalize at birth. The objectives of the present study is tor)ssess the potential role of maternal hyperglycaemia defined by 3rd tiimester mean blood glucose level'. together with some other maternal variables as a determinant of fetal weight at birth and the risk of macrosomia "birth weight <4000 g". Data from 178 diabetic a\$ 219 non-diabetic pregnant women were analyzed using multiple and logistic regression analysis. The results showed that 3rd trimester blood glucose level and duration of gestation, each had a significant positive relation to fetal weight at birth. However, the incidence of delivering < 4000 g baby was primarily related to maternal age in both the diabetic and non-diabetic groups, as well as to maternal body weight and duration of gestation in the non-diabetic group. It is concluded that, macrosomic newborns of diabetic mothers include two varieties of neonatal popula' tion: those with true "pathological macrosomia" together with constitutionally large newborns who do not exhibit the stigma of diabetic macrosmia. If macrosomia is to be used as an end-point in evaluating the outcome of management of diabetic pregnancies, a differentiation should be made between these two varieties of neonatal populations