Letter to the editor

Re: Factors predictive of macrosomia in pregnancies with a positive oral glucose challenge test: Importance of fasting plasma glucose

Dear Editor,

I read with interest the study on factors predictive of macrosomia in pregnancies with a positive oral glucose challenge test (OGCT): importance of fasting plasma glucose with interest [1].

The authors’ observation, that fetal macrosomia (≥ 4000 g) risk did not differ between gestational diabetes mellitus (GDM) patients with normal fasting plasma glucose (FPG) < 95 mg/mL (5.3 mmol/L)—i.e. mild GDM and non-diabetics, was based on clearly defined glucose target for 2-hour post prandial glucose (PPG) mentioned in their methodology [1]. Another study reported similar observation that fetal macrosomia risk was not significantly increased in women with mild gestational diabetics—normal FPG, but elevated PPG based on International Association of Diabetes and Pregnancy Study Group (IADPSG) guidelines. The glucose target for PPG was a 1-hour PPG of < 140 mg/mL (7.7 mmol/L) [2].

However, in a randomised controlled trial (RCT) of women with mild GDM (normal FPG, but elevated PPG) women in the treatment group (glucose target for PPG was a 2-h PPG < 6.7 mmol/L) had a reduced risk of fetal macrosomia (5.9%), when compared to those in the control/untreated group (14.3%)—thus highlighting the relationship between PPG and macrosomia [3]. Secondary analysis of women enrolled for the RCT, who completed a 3-hour 100-g oral glucose tolerance test (OGTT), but deemed non-diabetic were compared with those with mild GDM, but untreated. Fetal macrosomia was significantly reduced (10.2%) in non-diabetic women [4].

Therefore, there is a relationship between postprandial glucose level and fetal macrosomia, in women with normal FPG but elevated PPG.

Disclosure of interest

The author declares that they have no conflicts of interest concerning this article.

References


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