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Letter to the Editor

Gestational diabetes during COVID 19 pandemic: Major problem is diagnosis



Dear Editor

We have read with great interest the retrospective study performed in Australia published by Zhu S [1], in which they found that if the COVID-19 gestational diabetes mellitus (GDM) screening guidelines were used, 25.3% of patients would not have been diagnosed and received treatment for GDM. This is of concern to endocrinologists, as we know that timely diagnosis and treatment of GDM is important, because significantly improves peri-natal outcomes.

In this letter, we want to present a reality that occurs in countries with a high prevalence of coronavirus disease 2019 (COVID-19), in which the main issue of gestational diabetes is the diagnosis, because oral glucose tolerance test (OGTT), which is the gold standard [2,3], implies high risks of exposure and a burden for health services [1,3].

Due to this issue, various guidelines have updated their screening criteria for gestational diabetes, using fasting plasma glucose (FBG), HbA1c and random plasma glucose tests with greater flexibility and availability [2]. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) and the Australasian Diabetes in Pregnancy Society, recommend that an HbA1c \geq 5.9% and/or an FBG level \geq 5.1 mmol/L in the first trimester are considered diagnostic criteria for GDM, and that OGTT is only required when the FBG level is between 4.7 and 5.0 mmol/L [1,2]. The diagnosis of GDM during this period of pregnancy should not cause any difficulties.

In relation to GDM screening during 24–28 weeks of gestation, RANZCOG considers an FBG level of $>$ 5.1 mmol/L as the diagnostic criterion, whereas the Australasian Diabetes in Pregnancy Society also recommends performing an FBG test using the same cut-off point and considering OGTT only for women with an FBG level between 4.7 and 5.0 mmol/L [2]. The poor specificity and high number of false positives of FBG restricts its efficiency for screening; however, a benefit is that it may be useful to decide which patient requires OGTT and thus reduces their requirement by 50% [4].

Regarding HbA1c, both the ADA and NICE guidelines do not recommend its use during the second and third trimesters of pregnancy, because due to the physiological changes that occur, the

relationship between glycaemia and HbA1c is altered [5,6]. However, remarkably, the Royal College of Obstetricians and Gynaecologists guidelines recommend that women with an HbA1c level of \geq 5.7% during 24–28 weeks of gestation should be diagnosed as having GDM [2]. Various meta-analyses have shown that HbA1c has high specificity, but low sensitivity for the diagnosis of GDM, regardless of the threshold used, and that it should be used in association with other diagnostic tests [7].

In conclusion, we emphasise the importance that, due to the current pandemic, OGTT must be prioritized in pregnant women at high risk of gestational diabetes and that it is necessary to establish a consensus on the use of other diagnostic tools such as FBG and random plasma glucose.

Declaration of competing interest

The authors declare that there is no conflict of interest to disclose.

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