



Smartphones for gestational diabetes in the COVID-19 era

Ioannis Ilias¹

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Currently the worldwide COVID-19 pandemic has had a profound impact on the access to health services [1]. During pregnancy many women need to do an oral glucose tolerance test (OGTT); if positive, it rules in the diagnosis of diabetes in pregnancy. Since the access to health services under COVID-19 may be compromised, authorities and experts have provided alternative approaches for the diagnosis of diabetes in pregnancy, using single glucose measurements or glycated hemoglobin (A1c) levels [2–6]. The relevant studies are few and their results may not apply to all populations. Overall these studies show that neither blood glucose and/or A1c can replace OGTT [7, 8]. However, serial blood glucose measurements can be very informative regarding the status of glycemia. Extremely low cost point of care devices could be used for measuring various metabolites, but their use is yet to be implemented widely [9]. Diabetes - apparently- can also be detected by applications using smartphone flashlight-enabled photoplethysmography (reported sensitivity is 75–81%, specificity 54–65%), as shown in a recent article [10]. Thus, affordable and accessible technology that can be used for the self-monitoring of blood glucose (SMBG) exists in smartphones. We can speculate that following a validation clinical trial, in lieu of an OGTT that necessitates the physical presence of pregnant women in a healthcare setting (with increased exposure to infection) assessment of glycemia in pregnancy could also be tried non-invasively at home. This may not be a *lege artis* approach but it is a practical one, given the current COVID-19 situation.

Author contributions I.I. conceived, researched and wrote this contribution.

✉ Ioannis Ilias
iiliasm@yahoo.com

¹ Department of Endocrinology, Diabetes and Metabolism, Elena Venizelou Hospital, Athens GR-11521, Greece

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Compliance with Ethical Standards

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Code availability Not applicable.

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