

Opinion

Management of gestational diabetes during 'COVID19 time'

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Abstract

The measures put in place by many governments around the world to fight the spread of COVID-19 have drastically reduced visits to diabetes centres. To keep providing people with diabetes the professional support they need and reduce the inconvenience caused by the interruption of traditional assistance, the typical control visit can be carried out by virtual visit, telemedicine (TM) that should have the necessary characteristics to provide a correct execution. Especially this is important for pregnant women first diagnosed with gestational diabetes mellitus (GDM), they have the necessity to frequent checks in a short time due to the pregnancy.

Introduction

Since the outbreak of coronavirus disease (COVID-19) pneumonia in Wuhan, China, the World Health Organization (WHO) has declared COVID-19 a public health emergency of international concern [1].

With no vaccine or effective therapies, social distancing and quarantine have been the only widely-available interventions, creating a compelling reason for in-person care alternatives. The COVID-19 pandemic is rapidly transforming the healthcare system, with telemedicine (TM), or virtual health, being one of the key drivers of the change.

TM refers to health services and medical activities, such as the remote evaluation, diagnosis and treatment of patients by healthcare professionals performed using remote communication technologies, such as mobile phones, Bluetooth, telephones, email, and websites.

TM and digital medicine offer critically important approaches to improve access, efficacy, efficiency, and cost-effectiveness of medical care for people with diabetes, also for pregnant women first diagnosed gestational diabetes mellitus (GDM).

Ideally, TM facilitates the clinical management of diabetes by uploading glucose data in real-time, thanks to these data the doctor can provide a medical consultation through the system, which offers great convenience for patients in remote areas or in actual situation of social distancing, in addition can assist diabetologists to improve glycaemic control in patients between scheduled visits.

More Information

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Submitted: 14 May 2020

Approved: 26 May 2020

Published: 27 May 2020

How to cite this article: Di Biase N. Management of gestational diabetes during 'COVID19 time'. *Ann Clin Endocrinol Metabol.* 2020; 4: 020-022.

DOI: 10.29328/journal.acem.1001015

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Keywords: GDM: Gestational Diabetes Mellitus; TM: Telemedicine



Pregnant women are advised to be stringent with public health measures such as social distancing and self-isolation to lower their risk of COVID-19 exposure [2].

This has led to the rapid implementation of remote access to antenatal, ensuring women receive high-quality care and regular access to essential services while minimising the need for travel to antenatal clinics and have a face-to-face contact with the healthcare staff.

Discussion

Monitoring GDM is determining for a good health in the short and long-term, both for the mother and her offspring, it can avoid adverse pregnancy outcomes and prevent or delay future onset of type 2 diabetes. Timely detection, optimum treatment, and preventive postpartum care and follow-up is necessary and fundamental [3].

To diagnose the GDM during pregnancy women have to face prolonged waiting period in large groups at the hospital, and resource constraints, so, in this period, is not recommended a 2-hour for an oral glucose tolerance test (OGTT). For women considered to be at high risk of GDM there are temporally alternatives methods to OGTT [4]. All women diagnosed with GDM can access the diabetes unit for a first visit.

Studies indicate that many women are committed and motivated to change behaviour to protect the health of their unborn baby [5]. The correct setting of the first contact between the mother and the diabetes team is important, because it serves to provide psychological support to the pregnant woman who is facing a diagnosis that worries her, for the possible negative implications that it can have for what concern the fetus. It is very important during the first visit to establish a relationship between patient and doctor that becomes the reference point for the future.

My personal experience in Italy, where I currently work as a diabetologist, is that due to social distancing and quarantine all women with GDM diagnosis have the chance to do only the first visit to the clinic, where they receive nutritional counselling, are instructed in self-monitoring of blood glucose and are told to increase physical activity but with moderate intensity levels, if not contraindicated. In addition, each woman is told to download an app to record blood sugar. This app allows both patients and diabetologist to keep connected by exchanging text messages (short message service SMS) or progress reports via email [6].

Patients' capillary blood glucose are constantly checked by a diabetologist through the internet system on the online platform, and the patients are contacted by the diabetologist only if they required insulin therapy.

If blood glucose levels cannot be maintained in the therapeutic range (fasting < 95 mg/dl and 1 h postprandial < 140 mg/dl) insulin therapy should be initiated as first choice, the women return to the clinic only to be instructed for the self-administration of insulin with the appropriate device. At the same time, the patient must be comforted and encouraged to use the new therapy, here the role of the diabetologist is crucial.

The greatest potential of TM lies in its ability to help patients who cannot be easily treated in the clinics due social distancing and quarantine. TM provides a convenient channel for communication between medical staff and patients, through which the diabetologist can monitor the health status of patients in real-time.

Most of the systematic reviews and meta-analyses on the use of TM technologies for diabetes mellitus have demonstrated that TM tools help reduce the HbA1c value in individuals with type I, type II diabetes and GDM [7]. However, the effects of TM on other indices of glucose and pregnancy outcomes in patients with GDM remain uncertain [8].

I believe it is very important to investigate the impact of the Telemedicine and digital medicine on the quality of the relationship between doctor and patient.

The communication between doctor and patient face to face is very important especially for women during pregnancy, this

relationship can also reduce the anxiety of pregnant women and reassures them on the well-being of the fetus during the course of pregnancy.

I argue that the individual doctor-patient relationship remains paramount even at a time when public health principles mandate social distance and isolation.

Face-to-face interactions will certainly always have a central role in health care, and many patients prefer to see their physician in person.

Conclusion

TM present exciting opportunities to improve clinical care delivery for gestational and other forms of diabetes in pregnancy, but there are not trials that assessed patient satisfaction or cost of care delivery [9].

Considering the complexity of gestational diabetes mellitus, the effectiveness of telemedicine needs to be further studied in the future: technological advances now and in the future will present both opportunities and challenges.

All physicians already use non visit interactions to some extent, but their improvised approaches could be vastly improved, the health care system was designed with another approach, the face-to-face one, and only these new circumstances led to the implementation of telemedicine that if we want to keep has to be enhanced and upgraded.

TM is more convenient, is particularly beneficial to keep patients on track during and between scheduled office visits, but there's a difference between recreating an in-person approach, therefore, patients who address their needs simply, quickly, and efficiently by TM, must know that, if the clinical necessity requires an in-person visit, it will do.

Viewing in-person physician visits represents a deepened commitment to patient-centred care. TM is a useful tool to manage diseases at a distance but must be integrated by visits face to face.

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