

Diagnosing GDM: Role of Simple, Cost Effective, and Sensitive DIPSI Test

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About the Author



Navneet Magon is a doctor by design, a gynecologist, endoscopic surgeon by desire, and an obstetrician by passion; he currently works with the Indian Armed Forces. Ardently involved with academics, Dr. Magon is presently the National Coordinator for FOGSI Medical Disorders in Pregnancy Committee, FOGSI Foods & Drugs Committee as well as FOGSI Urogynecology Committee. He has over 50 peer-reviewed publications to his credit, is on the Editorial Board of many national & international journals, and is a member of the World Association of Medical Editors (WAME). Gestational Diabetes is one of the key areas of Dr. Magon's work-interest, and he is part of the core group and one of the authors of latest Indian guidelines on diagnosis and management of GDM.

The latest criteria on diagnosis and classification of diabetes mellitus [1] were recently published in *Diabetes Care*. In the section on GDM, the controversy over the one-step/two-step testing has resurfaced as expected after the NIH consensus statement [2]. One of the reported key factors in NIH decision-making process to favor two-step testing over the one-step IADPSG criteria was that screening with a 50-g glucose challenge test (GCT) does not require

fasting and is therefore easier to accomplish for many women. However, it should not be missed that all women who screen positive in 50-g GCT have to undergo a fasting GTT for diagnosis of GDM, and a good number of them test negative, which means undergoing a bothersome testing twice unnecessarily, as well as many of them get missed by a false negative screening.

The NIH consensus [2] as well as the present position statement [1] also highlights that there remains a strong consensus that establishing a uniform approach to diagnosing GDM will have extensive benefits for patients, caregivers, and policymakers.

In light of these issues, the role of a single-step test for screening and diagnosis of GDM using a 75-g glucose load irrespective of the last meal gains importance. The modified WHO test as proposed by Diabetes in Pregnancy Study Group India (DIPSI), and being used extensively in India,

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does not require fasting. It is, thus, simple and easier to accomplish, as is the case with a 50-g GCT screen in the two-step test. Furthermore, DIPSI test is a single-step procedure [3, 4] which serves both as screening and diagnostic tool, where a 2-h plasma glucose of ≥ 140 mg/dl after a 75-g glucose load is diagnostic of GDM. It does not require following-up with a second fasting test as is the case in two-step testing. It is the simplest test feasible and has a high sensitivity to diagnose GDM, almost as high as the IADPSG testing [5].

DIPSI is an organization consisting of healthcare providers from diverse backgrounds like diabetology, obstetrics, and endocrinology and other stakeholders with interest in diabetes in pregnancy. Through a highly successful series of conferences and publications, DIPSI has been able to bring GDM to a center stage in India. It helped fuel interest in potential complications of GDM as well as in its screening and management.

DIPSI test, which is “Made in India,” needs to be highlighted and brought into consideration at the world stage for discussions on its pros & cons for being considered among the universal screening strategies. Presently, the international statements and guidelines consider and deliberate all other tests in detail but the DIPSI test; whereas enough evidence is available on this now, out of which a few we have cited in this brief manuscript also [3, 5]. The point needs to be driven that DIPSI test has a scope to be the key for an international problem on consensus for GDM testing.

In conclusion, DIPSI diagnostic procedure is a simple, cost effective, and evidence based and has the potential to be a uniform testing approach in diagnosing. It causes least disturbance in a pregnant woman’s routine activities and

serves as both a screening and diagnostic procedure [6]. Indian guidelines have adopted this [7] and hope the world community with stakes in GDM and diabetic care shall take note. The Obstetricians, who are the key women’s healthcare providers, have to take a proactive role in screening all pregnant women for gestational diabetes, and the DIPSI test can provide the key universal solution.

Conflict of interest The authors, Navneet Magon and Monica Chauhan declare that they have no conflict of interest.

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