

Research Article

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**BA2025 1440: Early Management of Early Gestational Glucose Intolerance**

A. Chandrasekhar¹, N. Bhavatharini², G. Lakshmi³, B. Madhuri⁴, Palak Taneja⁵, S. Verma⁶.

¹ Madha Medical College and Research Institute, Obstetrics and Gynecology, Chennai, India. ² SRC Diabetes Centre, Diabetes, Erode, India. ³ Chennai, Obstetrics and Gynaecology, Chennai, India. ⁴ Diabetes in pregnancy study Group of India, Diabetes, Chennai, India. ^{5,6} GSVM Medical College, Obstetrics and Gynaecology, Kanpur, India.

Objective: Diabetes mellitus is a rapidly evolving pandemic and a significant public health problem in recent decades [1]
Aim

1. To determine the risk of GDM in the I Trimester at 8 weeks when 2hr PPBG is >110 mg% (Group B) without intervention
 2. To determine the risk of GDM in the I Trimester at 8 weeks when 2hr PPBG is >110mg% with intervention Metformin (Group C)
- Method**

A Prospective study in two centers; Group A, 182 pregnant women; Group B, 100; and Group C, 69. All of them were screened during 8-10 weeks and DIPS I tests were done to determine how many developed GDM.

Results

In Study 1 and Study 2 of Group A, less than 110 mg/dl, only 4% and 1.2% developed GDM, respectively. In Group B and Group C, if 2-hour post-prandial blood sugar is ≥ 110 mg/dl and no intervention in Group B study, 95.9% developed GDM. In the intervention, Group C, only 1.4% of women developed GDM, and that was because one woman discontinued Metformin after 6 months of gestation. This clearly shows there is great potential for preventing GDM and NCDs.

Design and method:

Testing for PPBS at the 8th week with 110mg/dl so that enough time is available before fetal insulin secretion starts in the 11th week. If PPBS more than 110mg/dl in the 8th week, the PPBS should be controlled with MNT and Exercise and, if necessary, with Metformin so that PPBS should be maintained at less than 110mg/dl (99 +/- 10) till the 12th week. At the 16th week, 75gm OGCT (DIPS I Test) should be done to know whether she develops GDM and, if negative, be repeated at the 24th and 32nd weeks.

Conclusion

The prediction of GDM is 2-hour PPBG > 110 mg/dl at the 10th week. Preventive action should be taken at the 8th week to ensure that maternal 2-hour PPBS remains between 99-109 mg/dl throughout pregnancy. To achieve a "Diabetes Free Generation," the focus should be on offspring development. This involves a concentration on the fetus for the future [2]. early weeks of pregnancy (10 weeks) and is labeled as EGGI.

Table 1 Post Prandial Blood Sugar in Study 1 and Study 2 and Group A, Group B and Group C conversion to GDM

Group A Euglycaemia PPBS <110 mg/dl		Group B PPBS≥110 mg/dl without Intervention		Group C PPBS≥110 mg/dl with Metformin 250 two times			
Study 1(Delhi)		Study 2 (Chennai)		Study1(Delhi)		Study 2 (Chennai)	
No of Patients	GDM	No of Patients	GDM	No of Patients	GDM	No of Patients	GDM
100	4%	82	1.2%	100	96%	69	1.4%

Ref: 1. International Diabetes Federation. IDF Diabetes Atlas, 10th ed. Brussels, Belgium: 2021. Available at <https://www.diabetesatlas.org>

2. Bronson SC, Seshiah V: Transgenerational Transmission of Non-communicable Diseases: How to Break the Vicious Cycle? Cureus. 2021, 13:18754. 10.7759/cureus.18754.

Additional Information

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