

OP 019

Postpartum glycaemic profile 6 weeks after delivery in mothers with gestational diabetes mellitus: a community based cross-sectional study

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Introduction & Objectives:

The occurrence of gestational diabetes mellitus (GDM) is growing worldwide and women with GDM have a seven fold relative risk of developing type two diabetes. Monitoring the trajectory is important to attenuate the progression. Hence this study determines the glycaemic profile of GDM mothers at six weeks postpartum.

Methods:

This descriptive cross-sectional component which is part of an ongoing cohort study (n=100) was conducted in three selected districts of Sri Lanka. In addition to demographics and anthropometric measurements, fasting plasma glucose (FPG) and insulin, 2-hr OGTT and HbA1c were performed. HOMA-ir was calculated to assess insulin resistance. Data were presented as means and percentages. Ethical approval was obtained from Ethics Review Committee, University of Sri Jayewardenepura.

Results:

Mean age (\pm SD) was 33.6 (\pm 5.8) years. 52% were para 2. The mean (\pm SD) BMI was 25.99 (\pm 4.67) kg/m². The mean (\pm SD) FPG, insulin, 2-hr glucose and HbA1c were 91.4 (\pm 11.5) mg/dL, 9.48 (\pm 10.62) mIU/L, 113.4 (\pm 36.4) and 6.64 (\pm 1.9) respectively. The mean HOMA-ir (\pm SD) was 2.16 (\pm 2.36). The 2-hr plasma glucose was within normal limits (minimum 68 and maximum 138 mg/dL) in all subjects. However, the values obtained for FPG, insulin, HbA1c and HOMA-ir were higher than the expected cut-offs in 28%, 57%, 4% and 38% of the sample respectively.

Conclusion:

Use of OGTT alone is not reliable to confirm achieving normal glucose homeostasis following GDM. Multiple parameters are suggested to monitor the postpartum trajectory towards normoglycaemia after GDM.