

PP-D-19

POSTPARTUM DIABETES SCREENING PROGRAM TO IDENTIFY RISK FACTOR(S) AND PROGRESSION TO PREDIABETES AND TYPE 2 DIABETES MELLITUS IN PATIENTS WITH PREVIOUS GESTATIONAL DIABETES MELLITUS

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INTRODUCTION

Females with previous gestational diabetes mellitus (GDM) have a greater lifetime risk of developing type 2 diabetes. Despite the increasing knowledge and recommendations, the postpartum screening rate is still insufficient. A postpartum diabetes screening and education program was established in Siriraj Hospital to improve these missed opportunities. This study aimed to investigate the prevalence and risk factors for prediabetes and diabetes among women with previous GDM at 4-12 weeks postpartum who were followed up in this program.

METHODOLOGY

A retrospective cohort study was conducted in women with previous GDM. During the 4–12 weeks after delivery, a 75-g OGTT was performed. The subjects were categorized into normal glucose tolerance (NGT) and abnormal glucose tolerance (AGT) groups according to the American Diabetes Association criteria. Clinical and laboratory data during pregnancy and at 4-12 weeks after delivery were analyzed.

RESULTS

Between October 2020 and March 2022, 845 women with GDM were scheduled to have postpartum diabetes screening, however, 41.8% of women were lost to follow-up. 374 women with previous GDM were enrolled. 31.3% of them develop AGT, including IGT (25.9%), IFG (1.3%), IGT with IFG (1.1%), and type 2 diabetes (2.9%). Univariate analysis demonstrated that women with AGT had higher 1-hour plasma glucose (1-h PG) after a 50-gram glucose challenge test (50-g GCT) and more gestational weight gain in women with pre-pregnancy BMI >30 kg/m² than the NGT group. The proportion of breastfeeding was less in the AGT than NGT group. Multivariate analysis showed that higher 1-h PG after 50-g GCT was a risk factor for developing AGT (OR 1.008; 95% CI: 1.001-1.015; $p = 0.036$), while breastfeeding was found to be a protective factor for developing AGT (OR 0.388; 95% CI: 0.168-0.892, $p = 0.026$). ROC analysis revealed that 1-h PG after the 50-g GCT >160 mg/dl was predictive of postpartum abnormal glucose metabolism.

CONCLUSION

Despite, the knowledge of the potential harms of GDM, only 48% of women with previous GDM returned for postpartum diabetes screening. Of these, 31.3% of them develop prediabetes or diabetes during early postpartum screening. Women with high 1-h PG after a 50-g GCT, especially >160 mg/dL, should receive intensive strategy to make them return for follow-up visits and intensive lifestyle modification. Breastfeeding should be promoted in women with previous GDM to protect them from developing postpartum AGT. The postpartum diabetes program may enhance long-term follow-up in women with previous GDM.

KEYWORDS

gestational diabetes, postpartum diabetes, risk factors, abnormal glucose tolerance

PP-D-20

COMPARISON OF RENAL PROTECTIVE EFFECTS BETWEEN SGLT2 INHIBITORS AND DPP4 INHIBITORS IN TYPE 2 DIABETES IN REAL-WORLD CLINICAL PRACTICE

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INTRODUCTION

Recent prospective randomized studies have shown that sodium-glucose cotransporter 2 inhibitors (SGLT2i) had renal protective effects compared to placebo in patients with type 2 diabetes (T2D). In this study, we compared the renal composite outcomes between patients with T2D treated with SGLT2 inhibitors and those treated with dipeptidyl peptidase 4 inhibitors (DPP4i) using real-world clinical data.

METHODOLOGY

This retrospective observational study used the Observational Medical Outcomes Partnership Common Data Model (OMOP-CDM) database at four different university hospitals (Soonchunhyang University Hospitals in Seoul, Bucheon, Chunan, and Gumi) in Korea. The patients prescribed with SGLT2 inhibitors or DPP4 inhibitors for at least 90 days were included in the SGLT2 inhibitor or DPP4 inhibitor group, respectively. Subjects prescribed GLP-1 receptor agonists or insulin were excluded in both groups. Renal composite outcomes included a 30% decline in estimated glomerular filtration rate (eGFR) compared to baseline or creatinine doubling or dialysis or death from any cause.