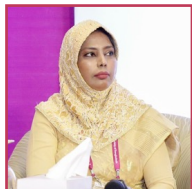


Investigation on the Association of Maternal Serum Visfatin Concentration with Gestational Diabetes Mellitus



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Introduction: Gestational diabetes mellitus (GDM) is a common pregnancy complication that can have adverse effects on both the mother and the child. Visfatin, an adipokine, has been suggested to play a role in the pathogenesis of GDM. Still, the association between maternal serum visfatin concentration and GDM remains unclear, particularly in the Bangladeshi female population. This study investigated the association between maternal serum visfatin concentration and GDM in the Bangladeshi female population.

Methods: A total of 69 patients participated in this study, including 34 patients with gestational diabetes mellitus (GDM, cases) and 35 patients without GDM (non-GDM, controls). Maternal age, gravida, pre-pregnancy BMI, family history of diabetes, fasting glucose, fasting insulin, HOMA-IR, and lipid profile were assessed. Serum visfatin concentrations were measured and compared between the two groups.

Results: The GDM group had significantly lower serum visfatin concentrations compared to the non-GDM group (0.72 ± 0.38 ng/ml vs 1.12 ± 0.7 ng/ml, $p < 0.05$).

Conclusions: This study suggests that lower maternal serum visfatin concentrations are associated with GDM and visfatin levels are inversely related to insulin resistance in women with GDM. Consequently, a potential role of visfatin in the pathogenesis and management of GDM is associated with the Bangladeshi population and thus visfatin may represent a novel diagnostic or prognostic biomarker for GDM. Therefore, further research will be valuable to elucidate the underlying mechanisms and explore the clinical implications of these associations.

Keywords: Gestational diabetes mellitus (GDM), Visfatin, Fasting Glucose, Fasting Insulin, HOMA-IR, Triglycerides, TC, HDL, LDL

Biography:

Dr. Hasina Begum is an accomplished medical professional specializing in Gynecology and Obstetrics, with over 22 years of experience. She serves as an Associate Professor at the Institute of Child and Mother Health (ICMH), Dhaka, managing high-risk pregnancies, infertility, and surgical procedures. She actively trains postgraduate students, nurses, and healthcare workers. Holding an MS from Dhaka University and an FCPS in Feto-Maternal Medicine from BSMMU, she has contributed extensively to medical research, publishing in national and international journals. Her commitment to patient care, education, and research continues to shape maternal healthcare in Bangladesh, improving outcomes for countless women.