Gestational diabetes mellitus - experience in BSMMU, Bangladesh

South-East Asia has the highest prevalence of hyperglycemia in pregnancy (24.2%). Screening for gestational diabetes mellitus (GDM) is important owing to adverse fetal and maternal outcomes and risk of developing diabetes in future. Different methods of screening have hindered the development of a universal diagnostic criterion for GDM. An alarming frequency of GDM in Bangladeshi population following World Health Organization (WHO) 1999 and WHO 2013 diagnostic criteria respectively (36.6% and 40.9%) was observed. Comparison of WHO 1999, modified O’Sullivan and WHO 2013 criteria for GDM revealed discrepancy among these criteria despite good agreement. We observed higher frequency of risk allele, TCF7L2 rs7903146 in Bangladeshi GDM mothers under pilot study. Association was stronger in women having lower age and body mass index (BMI). Postpartum persistence of abnormal glucose tolerance (AGT) in GDM was also higher (50%); AGT in early gestation, use of insulin during pregnancy, higher maternal age and BMI were predictors for it. Adverse events were relatively higher in mothers with AGT than those with normal glucose tolerance (NGT) despite treatment (not significant). Implementation of 03-sample OGTT in resource poor setting is difficult. We are comparing diagnostic efficiency of simpler Diabetes in Pregnancy Study Group India (DIPSI) criterion with intention to implement for screening of GDM in community level. The extent of thyroid dysfunction in mothers with GDM is also being evaluated by our group. Multinational broad-based comparative studies are needed to explore the genetic predisposition and risk factors for GDM among the ethnic groups of different countries in Asia.

Biography

M A Hasanat has completed his MPhil in 1990 and MD (Endocrinology and Metabolism) in 1997 from Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic Disorders (BIRDEM), Dhaka, Bangladesh. He is the Chairman of Department of Endocrinology, Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh. He has published more than 45 papers in reputed journals at international and national level. He is very keen to teaching and academic research all through.

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