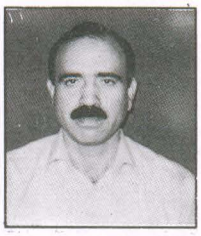
EDITORIAL



Gestational Diabetes Mellitus : New Diagnostic & Therapeutic Perceptions !

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Gestational Diabetes Mellitus (GDM) is defined as glucose intolerance of variable degree with onset or first recognition during the present pregnancy. This journal, JK Science published an interesting review article in one of its recent issues on this subject (1). Significant developments have occurred in the recent past about the diagnostic and therapeutic aspects of GDM. Glucosuria is a common finding in pregnancy due to increased glomerular filtration and is therefore unreliable as a diagnostic finding. The traditional method of screening for GDM is to assess risk factors: age, pre-pregnancy weight, family history of diabetes in a first-degree relative, previous large baby and previous perinatal loss. Unfortunately, screening based solely on risk factors will only identify approximately 50% of women with GDM. The American Diabetes Association recommended that all pregnant women, who have not been identified with glucose intolerance earlier in pregnancy, be screened with a 50g 1-hour glucose tolerance between 24 and 28 weeks of pregnancy. Such test can be performed at anytime of the day and with disregard to previous meal ingestion. A value equal to or above 140 mg/dL should be used as the threshold level and indicates the need for a 100g 3-hour oral glucose tolerance test (OGIT). Recently WHO has recommended the routine 75 gm OGIT for the diagnosis of GDM (2). Pregnant women who meet WHO criteria for diabetes mellitus or impaired glucose tolerance are classified as having GDM. A recent study compared the prevalence of GDM using new 1998 WHO provisional criteria and previous 1985 WHO criteria (3). It proved that prevalence of GDM is minimally altered by the new criteria and vast majority have hyperglycemia in the range considered impaired glucose tolerance outside pregnancy.

Gestational diabetes is pathophysiologically similar to type 2 diabetes melitus. Approximately 90% of the persons identified have a deficiency of insulin receptors (prior to pregnancy) or a marked increase in weight that has been placed on the abdominal region. The other 10% have deficient insulin production and will proceed to develop mature-onset insulin-dependent diabetes. Type 2 diabetes mellitus is one of the common diseases in our community so the prevalence of GDM is likely to be high (4,5). Obesity is emerging as a major issue particularly in women (6). We need to have high index of suspicion to diagnose as many cases as possible and as early as possible. In view of these pathophysiological considerations, a study was recently published evaluating the role of glibenclamide in GDM (7). This study showed that glibenclamide could be safe in the management of GDM so long as it controlled hyperglycemia. However, it may be too premature to start using glibenclamide in

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GDM on the basis of one single trial. For time being, diet and insulin therapy continue to be the main stay of GDM management. Nutritional counselling is the mainstay of therapy for the gestational diabetic woman. The optimal dietary prescription would be one that provides the calories and nutrients necessary for maternal and fetal health, results in normoglycemia, prevents ketosis, and results in appropriate weight gain. One of the difficulties with dietary prescription for women with GDM is the difference between lean and obese women. Obese women with GDM may benefit from a low calorie diet and weight reduction to reverse the metabolic disturbances, but proper nutrition is needed to assure fetal growth and development. If diet is not successful in maintaining relative euglycemia, then insulin therapy is recommended.

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