PINAR KUCUK: Current approaches in the treatment of diabetes in pregnancy. (Diploma thesis)

ABSTRACT

The management of pregestational diabetes requires tight metabolic control to reduce maternal and perinatal morbidity and mortality. It has been suggested that type I diabetes is a disorder characterized by insulin deficiency and type II diabetes is characterized by insulin resistance. If patient is having type II diabetes, they require higher doses of insulin in pregnancy and limited use of oral hypoglycemic agents; moreover, both type I and type II diabetes mellitus appear to have a necessity of administering different doses of insulin in each trimester.

Gestational diabetes mellitus (GDM) is characterized by glucose intolerance of variable severity that begins or is first diagnosed during pregnancy and which shares the same pathophysiology and clinical signs as diabetes mellitus type 2. As well as for a diabetic pregnancy, the therapeutic management of gestational diabetes mellitus must be instituted early and must be intensive.

Risk factors for the development of GDM include obesity, older age, family history, previous history of GDM or poor obstetric outcomes, ethnicity, polycystic ovary syndrome and as more recently noted, hypertension. GDM may also be caused by genetic variation that predisposes women to autoimmune T1DM or late autoimmune diabetes of adulthood. The key symptom of GDM is the development of diabetic fetopathy.

GDMis diagnosed by an oral glucose tolerance test coupled with a fasting blood glucose test. Many clinicians support the concept that all pregnant women should be screened between 24 and 28 weeks or sooner on the basis of low-or high risk factors.

The cornerstone of therapy for GDM is extremely tight glycemic control. Medical nutritional therapy and exercise are generally initiated for newly diagnosed women prior to medical intervention, but diet therapy over a longer period may predispose the patient to increased risk for preeclampsia. Pharmacological management of gestational diabetes mellitus may include oral antidiabetic agents, among which glyburide and metformin, are the most often used ones. Insulin therapy is applied to treat GDM only in women with contraindication of antidiabetic agents. Insuline analogues are generally considered safe for use in pregnancy.