The prevalence of gestational diabetes in a Sri Lankan antenatal clinic.

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Abstract

INTRODUCTION:

Early diagnosis of gestational diabetes mellitus (GDM) is a prerequisite to reducing fetal and neonatal complications of GDM.

OBJECTIVES:

(a) To ascertain the prevalence of GDM in a Sri Lankan pregnant population. Using the 75 g oral glucose tolerance test (GTT) and WHO criteria. (b) To establish the predictive value of a 50 g glucose challenge test (GCT) compared to the GTT (c) To compare the outcome of pregnancy in GDM with 'non-diabetic pregnancy' (NDP) STUDY DESIGN: Prospective study on a cohort of pregnant women attending antenatal clinics.

SETTING:

Sri Jayawardenepura General Hospital (SJGH) RESULTS: Of the 721 patients, 131 (18%) had a positive GCT. 40 (5.5%) patients had GDM. If a one-hour GCT of 7.8 mmol/l was considered suspicious of GDM the sensitivity of the glucose challenge test was 63% and the specificity 84%. Statistically significant differences in the prevalence was found when the women were > 35 years [Relative risk (RR) = 3.87 (95% CI-2.06 to 7.27)] or the body mass index > or = 25. (RR = 2.45 (95 CI-1.30 to 4.61) Presence or absence of high parity, family history of diabetes or recurrent abortions had no significant impact on the prevalence of GDM. Mean birth weight was higher ($p < 0.05$) in GDM (3615 SD 103) than in NDP (2898 SD 143.6). The likelihood of having a caesarean section was higher ($p < 0.01$, Relative risk (RR) 2.50, 95% CI 1.56-3.95) in GDM when compared to NDP. A higher incidence of hydramnios ($p < 0.01$ RR 3.41 95% CI 1.44-8.05) was recorded in GDM when compared to NDP.

CONCLUSION:

The prevalence of GDM in the antenatal clinics at SJGH is 5.5%. Traditional risk factors did not predict GDM. GDM is associated with a higher risk of caesarean section, hydramnios and macrosomia. Hence screening for GDM should be performed in all pregnant women at 24 to 28 weeks of pregnancy using a GCT.