INTRODUCTION
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The detection of patients with gestational diabetes, a state of carbohydrate intolerance of variable severity, with onset or first recognition during pregnancy, represents an important diagnostic challenge. Gestational diabetes mellitus complicates between 1% and 5% of all pregnancies. The incidence of this disorder varies with the population studied and the criteria used to establish the diagnosis (Hadden, 1985).

The incidence of diabetes appears to be increasing, rather than decreasing, and while the mortality and morbidity rates for women appear to be better than for men, they are still high and show wide regional variations. The sooner that such women can be detected and returned to a normoglycemic status, the better their prognosis will be (Lind, 1985).

Failure to recognise gestational diabetes can be associated with an increased fetal death rate and greater perinatal mortality. Furthermore, patients with gestational diabetes mellitus are at an increased risk for the onset of overt diabetes in later life. Thus , establishing the diagnosis of gestational diabetes mellitus is important not only for perinatal outcome,but also for future health

of the mother (Landon et al, 1986). Compared with the age specific incidence of diabetes Buschard et al.(1987) , found that the incidence was at least 70% higher in pregnant than in non-pregnant women. This increased incidence occured in the third trimester when the risk of developing diabetes was 3.8 times that of non-pregnant women.

Because of the morbidity associated with undiagnosed gestational diabetes, screening programs are advocated in all pregnancy clinics. Jovanovic and Peterson, (1985), elucidated that the optimum time of testing for diabetes is between 27-31 weeks, and that of retesting is at 33-36 weeks.

Testing urine for the presence of glucose is a time honored method for screening for diabetes mellitus. The presumption that a non-pregnant woman who has detectable glycosuria has elevated blood glucose concentrations is not unreasonable (Lind,1985) . Assuming an average glomerular filtration rate of 100 ml/min and maximum renal tubular reabsorptive capacity of about 300 mg/min , the presence of glucose in the urine would indicate blood glucose concentrations in excess of 300 mg/dl. However, if the glomerular filtration rate increases or the tubular reabsorptive capacity for glucose decreases , then glucosuria could occur at lower blood glucose concentra-

tions , hence reducing its diagnostic value . Both of these changes occur as part of the normal maternal physiologic adaptation to pregnancy (Lind and Hytten , 1972). The increased excretion is proved to be physiologic, rather than due to any disorder of carbohydrate metabolism (Lind,1985).

O'Sullivan et al. (1973), demonstrated that an oral glucose challenge test (O.G.C.T) done from a blood sample collected one hour after ingestion of 50 gm glucose , and , followed by a 3-hour glucose tolerance test , in patients with a blood glucose level exceeding 130 mg/dl of whole blood (positive O.G.C.T.) , is an effective way of identifying potentially diabetic patients .

If it is accepted that diabetes mellitus should be screened for, as a part of good antenatal care, then a random blood glucose measurement, offers an easy, efficient and relatively inexpensive method for its detection. While there are differing opinions regarding the blood glucose levels that are diagnostic of diabetes, yet the criteria of the World Health Organisation WHO (1980), are very similar to those of the European Association for the Study of Diabetes (1979), and are gaining widespread acceptance (Lind, 1985).

It would not be practical to perform an oral glucose tolerance test (O.G.T.T.) for every pregnant woman because of cost and the added burden upon busy antenatal clinics. On the other hand, blood glucose level determined in a

blood sample obtained during the course of routine antenatal examination would be more practical (Lind and Mc Dougall, 1981).Hatem and Dennis (1987), described a method for screening all pregnant women for abnormal glucose tolerance. It is based on determining random plasma glucose level, having simply noted , whether the woman had eaten within the preceding 2 hours or not . The calculated 99% cut off value was 110 mg/dl (6.1 mmol/L) within 2 hours of a meal or 101 mg/dl (5.6 mmol/L) more than 2 hours post-prandial . This method of screening is cheaper and is slightly more efficient than screening based on conventional risk indications. They agreed with Lind and Mc Dougall (1981), that screening based upon random plasma glucose estimation offers a simple, reliable and cost-effective program.

The high correlation between capillary and venous glucose concentration and the accuracy of various reflectance meters , including the Accu-check, (Glucochek II, and Ames Dextrostix) have been well documented. The capillary glucose concentration exceeded the venous concentration by a mean of 15.6%. (Weiner et al, 1986).

The use of widespread screening programs to identify patients with gestational diabetes has reduced perinatal mortality rates for affected pregnancies to levels similar to those in the normal population (London et al, 1986).