

# SUMMARY & CONCLUSION

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This prospective cohort study was carried out at the department of Obstetrics and Gynaecology, Medical College, Baroda over a period of one year.

The main objectives of the study were to assess the prevalence of gestational diabetes in Indian population, to identify the risk factors, to identify pregnancies at increased risk for perinatal morbidity and mortality and management of GDM.

One fifty antenatal mothers were subjected to glucose challenge test. Of these 15 women were found to have either mild gestational Hyperglycaemia (9 women) or GDM (6 women). All one fifty women were followed up to delivery.

=>The observations from the study are summarised below.

Total 88 (65.19%) women were in the age group of <25 years in the normal group, 5 women in the GDM group were  $\geq 25$  years in age.

The association with the age is statistically significant in the  $\geq 25$  years age group.

Parity of more than equal to 3 was found to be statistically correlated to MGH/GDM.

30 (20%) women who were screened outside the 24-28 week period had either high/average risk factors according to the Metzger classification. 9 (20%) women screened had either MGH or GDM.

The association with BMI more than equal to 25 and waist hip ratio more than equal to 0.85 was found to be statistically correlated with MGH or GDM. Women with BMI more then equal to 25 are 8 times more likely to develop MGH or GDM.

Women with MGH or GDM are more likely to have pregnancy induced hypertension and antepartum h'age.

Women with MGH/GDM are more likely (66%) to fall in Mitzger's high-risk category as compared to women with normal GCT.

Women with P/H/O PIH were 5 times more likely to develop MGH or GDM.

Also women with P/H/O foetal loss are more likely to develop MGH or GDM.

Babies of women with MGH or GDM are more likely to have NICU admission as compared to those without.

Babies born to women with MGH or GDM are 8 times more likely to have jaundice requiring phototherapy, as compared to women without MGH or GDM.

Statistical association was found between GDM and mode of delivery.

In the normal GCT group, 2 (1.50%) babies had a birth weight > 3.5 kg, and in the MGH/GDM group 3 (20%) had the same. These observations were statistically significant for babies weighing > 3 kg.

=> All 6 GDM mothers in this study treated by diet therapy and insulin. The total calories in the diet were between 1800-2000 daily and 50% of energy is obtained from carbohydrates.

Insulin was given in form on regular insulin in three divided doses with regular monitoring of sugar levels.

## **\*\*CONCLUSIONS\*\***

Using the oral glucose challenge test in pregnant women for screening of gestational diabetes, we have to found a prevalence of Mild Gestational Hyperglycaemia of 6% and of Gestational diabetes of 4%

Women with high or average risk factors should be screened outside the recommended period of 24-28 weeks gestational period and at the first antenatal visit.

The risk category scoring proposed by Metzger was found to be reliable guideline for screening for GDM. However 2 of the 6 women in the GDM group were in the low risk category, therefore, this Risk Scoring System needs to be verified against a large study group before being recommended for community application.

We propose the following clinical risk factors as determinants of GDM.

- A. Age  $> 25$  years
- B. Gravida  $\geq 3$
- C. BMI  $\geq 25$
- D. Waist-Hip ratio  $\geq 0.85$
- E. P/H/O PIH
- F. Presence of PIH and APH in current pregnancy.

Given the fact that 2 of the 6 women in the GDM group had no risk factors. It is not possible on the basis of this study to recommended selective screening in pregnancy, based of risk factors alone.

Neonatal morbidity such as birth asphyxia, hypoglycaemia, hyperbilirubinemia requiring phototherapy, congenital malformations, IUGR and still birth more associated with gestational diabetes.

Insulin therapy is required for better obstetric and neonatal outcome.

This study strongly supports recommendations for universal screening at all pregnant women.