

## Title: A PROSPECTIVE OBSERVATIONAL STUDY ON FOLLOW UP OF GESTATIONAL DIABETES MELLITUS PATIENTS ON MEDICAL NUTRITION THERAPY AT TERTIARY CARE CENTRE



### INTRODUCTION

Gestational diabetes (GDM) represents carbohydrate intolerance first discovered in pregnancy, occurs in 3.8-21% of pregnancies. Dietary glycemic control is defined as a part of comprehensive treatment of GDM and diets low in carbohydrates, lipids and proteins have demonstrated to reduce hyperglycemia compared with diets high in carbohydrates alone.

### OBJECTIVE

To see the compliance of patients with MNT and the conversion of patients from MNT to pharmacotherapy.

### MATERIALS AND METHODS

This is a prospective observational hospital-based study. In this study, all the antenatal women attending the outpatient department, undergoing one step test called DIPSI with sugar level  $>140$  mg/dl and diagnosed with gestational diabetes mellitus at department of OBG were included in this study. A diet chart was formulated according to the BMI of the patient and compliance of the patients with MNT and change from MNT to pharmacotherapy were observed

### RESULTS

This study was carried out in 100 patients who were diagnosed with GDM and started on MNT therapy. Following MNT for 2 weeks it was seen that there was a significant improvement and patients developed compliance to MNT. Blood sugar values FBS  $<95$  mg/dl was seen in 80% and PPBS  $<120$  mg/dl was seen in 47% of cases. There was a significant association with age, BMI, family history of type 2 DM, history of GDM in past pregnancy, PIH and the risk of development of GDM in present pregnancy. Patients who were only on MNT had better maternal outcomes in terms of delivery and neonatal outcomes.

**CONCLUSION** There is relationship between fasting and postprandial blood sugar values and neonatal outcomes. Early diagnosis and treatment of gestational diabetes with adequate antenatal care are essential to reduce the adverse neonatal outcomes. So universal screening in early gestation is recommended. Once diagnosed with GDM appropriate glycemic control either via insulin or meal plan has to be achieved for good pregnancy outcome and to prevent the complications. But when the number of risk factors increases the risk for GDM is increased. Proper counselling should be given to the patient at the time of discharge to have her sugars checked in postpartum period

### REFERENCES

1. [https://nhm.gov.in/New\\_Updates\\_2018/NH\\_M\\_Components/RMNCH\\_MH\\_Guidelines/Gestational-Diabetes-Mellitus.pdf](https://nhm.gov.in/New_Updates_2018/NH_M_Components/RMNCH_MH_Guidelines/Gestational-Diabetes-Mellitus.pdf).
2. Hernandez TL, Brand-Miller JC. Nutrition Therapy in Gestational Diabetes Mellitus: Time to Move Forward. Diabetes Care. 2018 Jul;41(7):1343-1345. doi: 10.2337/dci18-0014. PMID: 29934477; PMCID: PMC6014541.

