World Academy of Science, Engineering and Technology International Journal of Biomedical and Biological Engineering Vol:13, No:02, 2019

Effect of Diet and Life Style Modification to Control the Plasma Glucose Level in the 60 Patients of Gestational Diabetes Mellitus

Authors: Vivek Saxena, Shreshtha Saxena

Abstract: Background: Gestational diabetes mellitus (GDM) is defined as impaired glucose tolerance first recognized during pregnancy. Uncontrolled or untreated GDM is associated with various adverse outcomes to the maternal and fetal health. Overt diabetes mellitus may also develop in such patients. It is universally accepted fact that first and foremost management to treat GDM is dietary control and lifestyle modification even before starting any oral hypoglycemic agent (OHA) or insulin. So, proper dietary management and little changes in the patient's lifestyle are very effective for reducing her plasma glucose level. Objectives: Proper counselling of the patients and flexibility in their lifestyle and diet can effectively control the plasma glucose level in GDM patients. Methods: Total 60 GDM patients of age > 18 years were taken. We had three counselling sessions with the patient and other members of the family like husband, parents, and in-laws at different intervals, discussed their lifestyle and diet pattern, helped them to eliminate the factors those had an adverse effect on plasma glucose level and promoted them to acquire a healthy lifestyle. We have counselled the patient and her family member separately and then together also. They have explained how increased plasma glucose level can be effectively controlled with the little modification in their diet and routine activities. They were also taught to remain stress-free during their rest of antenatal period. We have excluded the patients from our study who were diabetic before pregnancy and patients with other comorbid illnesses like hypothyroidism and valvular heart disease. Results and conclusions: Results were very rewarding as patients could acquire a lifestyle of their choice. They were happy because extra pill burden was not there. All the 60 patients were normoglycemic in remaining antenatal period, 48 patients were delivered normally and 12 patients underwent cesarean section due to various reasons. Regular counselling of the patients regarding their disease and little alterations in diet and lifestyle controlled the plasma glucose level much effectively. The things were more easier and effective when we included other family members during our counselling session because they play a major role in patient's day to day activity and influence her life.

Keywords: dietary management, gestational diabetes mellitus, impaired glucose tolerance, oral hypoglycemic agent, pregnancy

Conference Title: ICMED 2019: International Conference on Metabolism, Endocrinology and Diabetes

Conference Location : Kuala Lumpur, Malaysia **Conference Dates :** February 11-12, 2019