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“For the Diagnosis of Gestational Diabetes Oral Glucose Tolerance Test gives reliable results.”

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Introduction :-

We all know about the diabetes, its symptoms, diagnosis, management, complications etc.

For type I and type II diabetes, Generally Blood sugar fasting and blood sugar postmeal (2 hours after meal is performed for diagnosis.

As a routine during pregnancy along with some investigations Blood Sugar is advice to perform to rules out Gestational Diabetes is a condition detected during pregnancy, purpose is strict glxemic control is essential to minimize material and fetal morbidity of mortality of pregnancies of diabetic.

HbA_{1C} is the test, perform to know the last three months average of sugar control for which EDTA sample is require, but HbA_{1C} levels are significantly lower in early and late pregnancies.

Abstract :-

To avoid mortality and morbidity of mother and baby, it is very much important to diagnose Gestertional Diabetes.

Generally the procechre called as OGTT (Oral Glucose Tolarance Test) is advice parallel HbA_{ic} is performed in each patients.

Experimentation :-

Total three blood samples are taken.

Patient is explained by Gynecologist or Pathologist – how to prepare for this test OGTT.

- 1) First sample of Blood is taken in totally fasting condition for Blood Sugar estimation.
- 2) After giving 75 gm of glucose with water, After one hour second blood sample is taken for Blood Sugar estimation.
- 3) Then after 2 hours of glucose intake, Third sample is taken for Blood Sugar estimation. All 100 pregnant ladies were healthy pregnant ladies having pregnancy of 24 to 28 weeks of pregnancy. If there is family history of diabetes previous pregnancy gestational diabetes, Generally Gynecologist advice for OGTT during 12 weeks 18 weeks of pregnancy.

Observations :-**Table 1: Indicating Results of OGTTT during 24 to 28 weeks.**

No.	Patient Name	F Blood Sugar	1 Hr.	2 nd Hr.	HbA1c
1	ABC	75 mg/dl	122 mg/dl	138 mg/dl	4.6
2	XYZ	70 mg/dl	145 mg/dl	194 mg/dl	5.6
3					
4					
100					

It is observed that, it is random study and only 24 percent pregnant ladies diagnosed as having Gestational Diabetes. It is well known fact that according to values observed. Insulin is given by the opinion of both Gynecologist and diabetologist.

Though HbA1c is good parameter to know the last three months sugar control, it is not giving satisfactory results during pregnancy.

Table : 2

HbA1c during pregnancy :-

No.	Condition in Pregnancy	Value of HbA1c
1	Normal Non Pregnant Women	4.7 to 6.3 %
2	Early Pregnancy	4.5 to 5.7 %
3	Late Pregnancy	4.4 to 5.6 %

Table: 3

Normal Interpretation of OGTT
(Oral Glucose intake 75 gm.)

(Oral Glucose Tolerance test)

Condition

Indicating Borderline acceptable values.

- | | |
|--|-------------|
| 1) Fasting | □ 92 mg/dl |
| 2) After one hours of 75 mg of glucose | □ 180 mg/dl |
| 3) After two hours of 75 mg glucose | □ 153 mg/dl |

If any of the above glucose level is elevated, then it is diagnosed as Gestation Diabetes.

Conclusion & Importance of Diagnosis of Gestational Diabetes :-

If during OGTT, any of the one value out of three cross the limit, it is labeled as Gestational Diabetes.

Early diagnosis, early care and management are important to avoid complications of Gestational Diabetes. Main complications of Gestational Diabetes large birth weight babies, birth trauma and breathing difficulty.

Premature labour due to polyhydramnios, which may result in baby's position problems with position of umbilical cord.

Stillbirth possibility is very rare.

References :-

- 1) Clin. Chem 2012 Jul; 58(7) 1152 - 4 pubmed.
- 2) Diabet Med 2009 Oct; 26 (10); 1068-9 pubmed
- 3) O' Kone MJ lynch PLM Molos
KIN, Magree SE; Determination of Diabetic Control and complications triad aligned HbA1c reference range in pregnancy. Clin Chem Acta 311 : 157-159, 2001