

# بسم الله الرحمن الرحيم





# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



# جامعة عين شمس

التوثيق الإلكتروني والميكرو فيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
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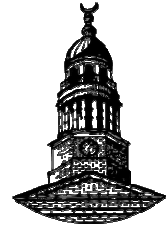






# بالرسالة صفحات لم ترد بالأصل





KASR ALAINY

**Prevalence Of Susceptibility Of Diabetes Mellitus  
In Pregnant Women In First Trimester**

**THESIS**  
SUBMITTED FOR FULFILLMENT OF MASTER DEGREE  
IN  
**OBSTETRICS AND GYNECOLOGY**

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: باللغة العربية:  
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الثلث الأول من الحمل.

- بناء على موافقة الجامعة بتاريخ ١٥ / ٥ / ٢٠١١ تم تشكيل لجنة الفحص والمناقشة  
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## **Abstract :**

Diabetes Mellitus is the most common medical complication of pregnancy. GDM is associated with increased fetal and maternal morbidity, and women with history of GDM are at increased risk for subsequent development of type 2 diabetes mellitus probably because both conditions share common risk factors. In addition the children of women who had GDM are at increased risk for obesity, glucose intolerance, and diabetes during adulthood. This causes a cycle of increased glucose intolerance in the population. So, detection of women at higher risk for GDM early in pregnancy is a desirable goal because interventions such as diet, exercise and medication may be applied earlier in pregnancy and potentially can reduce later development of GDM or its associated morbidities. This study was conducted on 100 single-tone pregnant women with gestational age 8–12 weeks. We excluded any pregnant patient with known diabetes or history of any medical disorder. Full history taking, complete general and abdominal examination and Ultrasonography were done. HbA1c, fasting & 2h postprandial blood sugar were done for all patients. Then all patients underwent routine GDM screening with 50 gm 1-hour oral glucose challenge test (GCT) between 24–28 weeks gestation. Patients with plasma glucose level  $\geq 140$ mg/dl underwent 100-g, 3-hour diagnostic oral glucose tolerance test (OGTT). Patients were classified into two groups according to development of gestational diabetes mellitus into GDM group and Normal group. The two groups were compared according to the presence of any risk factors make them susceptible for the development of gestational diabetes mellitus as age, high BMI, gravidity, parity, positive family history of diabetes mellitus(first degree relatives), previous gestational diabetes mellitus, previous high birth weight babies( $\geq 4$ kg), previous intra-uterine fetal death(IUFD), previous baby with congenital anomalies, recurrent pregnancy loss. Also compared for first trimester fasting blood sugar value, HbA1c % and number of risk factors in each patient. Also, outcome of the current pregnancy was compared in both groups as development of hypertension with pregnancy, type of delivery, birth weight and neonatal ICU admission.

## **Key Words :**

Diabetes Mellitus

First trimester

Prevalence

HbA1c



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## LIST OF ABBREVIATIONS

AC:	Abdominal circumference .
A1c :	Glycated hemoglobin.
ADA:	American Diabetes Association.
BMI:	Body mass index.
CEMACH:	Confidential Enquiry into Maternal and Child Health.
CV:	Coefficient of variation.
DAPIT	Diabetes and Pre-eclampsia Intervention Trial.
DM:	Diabetes mellitus.
DCCT:	Diabetes Control and Complications Trial.
FDA:	Food and drug administration.
FHR:	Fetal heart rate.
FPG:	Fasting plasma glucose.
GCT:	glucose challenge test.
GDM:	Gestational diabetes mellitus.
GIGT:	Gestational impaired glucose tolerance.
GluT-3:	Glucose transporter -3.
HAPO:	Hyperglycemia and adverse pregnancy outcome.
HbA1c:	Glycated hemoglobin.
HDL :	High density lipoprotein.
IDM:	Infant of diabetic mother.
IFG:	Impaired fasting glucose.