

GLYCAEMIC CONTROL IN PREGNANT WOMEN WITH DIABETES AND FETAL OUTCOME

Thesis

Submitted for Complete Fulfillment of the
Master Degree (M.Sc.) in

Obstetrics and Gynecology

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2010**

ACKNOWLEDGEMENT

*I would like to start with thank **Allaha** for granting me the ability to complete this work.*

*I would like to express my gratefulness to my **Professor Dr. Raafat Mohammed Reyad**, Professor of Obstetrics and Gynecology, Faculty of Medicine, Cairo University, advice support and guidance through out this work.*

*I would also like to express my thanks to **Dr. Hisham Gouda**, Lecturer of Obstetrics and Gynecology, Faculty of Medicine, Cairo University, for his help guidance and care.*

CONTENTS

	Page
▪ Introduction	1
▪ Aim of the work	4
▪ Review of literature	6
○ Metabolic changes during normal pregnancy	7
○ Diabetes mellitus	10
○ Metabolic changes of diabetic pregnancy	16
○ Complications of diabetes	20
○ Management of diabetes during pregnancy	28
▪ Patients and Methods	43
▪ Results	49
▪ Discussion	85
▪ Conclusion	98
▪ Recommendations	100
▪ Summary	103
▪ References	107
▪ Arabic summary	118

LIST OF TABLES

No.	Title	Page
1	Classification and observation on types of diabetes mellitus	10
2	Diagnostic criteria (American Diabetes Association) for diabetes mellitus type 2	12
3	Possible physical examination findings in patients with type 2 diabetes mellitus	15
4	Screening for gestational diabetes mellitus	29
5	Biophysical Tests of Fetal Well-Being for Diabetic Pregnancy	40
6	Mean blood glucose control	51
7	HbA1c control	51
8	Amniotic fluid index (AFI)	53
9	Biophysical profile (BPP)	53
10	Mode of delivery	55
11	Neonatal ICU	55
12	Congenital anomalies	57
13	Neonatal mortality	57
14	Neonatal jaundice	59
15	Respiratory distress syndrome (RDS)	59
16	Neonatal hypoglycemia	61
17	Maternal complications	61
18	Mean blood glucose control and AFI	63
19	HbA1c control and AFI	64
20	Mean blood glucose control and mode of delivery	65
21	HbA1c control& mode of delivery	66
22	Mean blood glucose control and NICU	67
23	HbA1c control and NICU	68
24	Mean blood glucose control and congenital anomalies	69
25	HbA1c control& congenital anomalies	70
26	Mean blood glucose control & mortality	71
27	HbA1c control& mortality	72
28	Mean blood glucose control & RDS	73
29	HbA1c control and RDS	74
30	Mean blood glucose control & neonatal hypoglycemia	75
31	HbA1c control& neonatal hypoglycemia	76
32	Mean blood glucose control & maternal complications	77

No.	Title	Page
33	HbA1c control& maternal complications	79
34	Mean blood glucose control & estimated fetal weight	80
35	HbA1c control& estimated fetal weight	81
36	Mean blood glucose control & 1 min apgar score(<7)	82
37	HbA1c control & 1 min apgar score (<7)	83
38	AFI & congenital anomalies	84

LIST OF FIGURES

No.	Title	Page
1	The relation between HbA1c and congenital anomalies	22
2	4% of the group was on diet control alone while 96% was on both diet control & insulin	50
3	Good versus poor glycemic control by using mean blood glucose	52
4	Good, intermediate & poor glycemic control in the past three months	52
5	Comparison between normal & abnormal AFI values	54
6	Normal versus abnormal BPP	54
7	NVD versus C.S.	56
8	Incidence of NICU admission	56
9	Presence versus absence of congenital anomalies in the study group	58
10	Incidence of neonatal mortality	58
11	Incidence of Neonatal Jaundice	60
12	Incidence of Respiratory distress syndrome (RDS)	60
13	Incidence of Neonatal hypoglycemia	62
14	Incidence of Maternal complications	62
15	This graph is showing the values of AFI in relation to glycemic control reflected by mean blood glucose, showing increase in AFI values from 12.9% in good & 21.1% poor glycemic control	15
16	This graph is showing the values of AFI in relation to glycemic control reflected by HbA1c, showing increase in AFI values from 13%, 18.2 % to 20 % in good, intermediate & poor glycemic control respectively.	64
17	The graph is showing the relation between the incidence of C.S. in good & poor glycemic control, there is increase in the incidence of C.S. in poor control (89.5%) than in good control (74.2%).	65
18	This graph is showing the relation between the incidences of C.S. in relation to glycemic control reflected by HbA1c, showing increase in incidence of C.S. values from 73.9%, 81.8% to 100 % in good, intermediate & poor glycemic control respectively.	66
19	This graph is showing the relation between the incidences of NICU admission in good glycemic control (15.4) versus poor glycemic control (23.5%).	67
20	This graph is showing the relation between the incidence of NICU admission in relation to glycemic control reflected by HbA1c, showing increase values from 14.3%, 17.6% to 40 % in good, intermediate & poor glycemic control respectively.	68

No.	Title	Page
21	Comparison between the values of congenital anomalies in good glycemic control versus poor glycemic control.	69
22	This graph is showing the relation between the incidence of congenital anomalies in relation to glycemic control reflected by HbA1c, showing: 4.3% in good, 22.7% in intermediate & 20% in poor glycemic control.	70
23	Comparison between the values of incidence of mortalities in good glycemic control versus poor glycemic control.	71
24	This graph is showing the relation between the incidence of mortalities in relation to glycemic control reflected by HbA1c, showing: 8.7% in good, 18.2% in intermediate & absent in poor glycemic control.	72
25	Comparison between incidence of RDS between good & poor glycemic control.	73
26	Comparison between incidence of RDS between good, intermediate & poor glycemic control	74
27	Comparison between incidence of neonatal hypoglycemia between good & poor glycemic control	75
28	Comparison between incidence of neonatal hypoglycemia between good, intermediate & poor glycemic control	76
29	Comparison between incidence of maternal complications between good & poor glycemic control	78
30	Comparison between incidence of maternal complications between good, intermediate & poor glycemic control	79
31	Comparison between incidence of macrosomic babies among patients with good & poor glycemic control	80
32	Comparison between incidence of macrosomic babies among patients with good, Intermediate & poor glycemic control	81
33	Comparison between incidence of 1 min apgar score <7 among patients with good & poor glycemic control using mean blood glucose	82
34	Comparison between incidence of 1 min apgar score <7 among patients with good, intermediate & poor glycemic control using HbA1c	83
35	The incidence of congenital anomalies in normal & abnormal AFI values	84

ABBREVIATIONS

AC	: Abdominal circumference
AFI	: Amniotic fluid index
BPD	: Biparital diameter
BPP	: Biophysical profile
CNS	: Central nervous system
CS	: Cesarean section
CTG	: Cardiotocography
CVS	: Cardio vascular system
DKA	: Diabetic ketoacidosis
DM	: Diabetes mellitus
FL	: Femur length
GAD	: Glutamic acid decarboxylase
GDM	: Gestational diabetes mellitus
HDL	: High density lipoproteins
IFG	: Impaired fasting glucose
IGT	: Impaired glucose tolerance
IOM's	: Institute of Medicine's
IUFD	: Intra uterine fetal death
LGA	: Large for gestational age
MAOIs	: Mono amine oxidase inhibitors
MBG	: Mean blood glucose
MODY	: Maturity-onset diabetes of the young
NICU	: Neonatal intensive care unit
NIDDM	: Non insulin dependent diabetes mellitus
NSAIDs	: Non steroidal anti inflammatory drugs
NVD	: Normal vaginal delivery
OGTT	: Oral glucose tolerance test
PI	: Pulsatility index
RI	: Resistance Index

Abstract

In conclusion glycemic control in pregnant diabetic females and fetal outcome had intimate relation to each other. It is useful in modulation of fetal outcome as regards to the fetal weight, congenital anomalies, fetal mortality, the need for NICU admission, neonatal jaundice. In our study we had patients in their third trimester presenting to us with gestational diabetes, or pregestational diabetes, either in good control or intermediate or poor controlled state. We tried to adjust the glycemic states as much as possible, however that was hard enough in poorly controlled patients. So the net result from this study that glycemic control started as early as possible (the best being preconceptional) is important to decrease the incidence of congenital anomalies, fetal weight, fetal mortality, the need for NICU admission and neonatal jaundice.

Keywords:

Glycaemic control
Pregnant women
Diabetes mellitus
Fetal outcome

INTRODUCTION

INTRODUCTION

Abnormal maternal glucose regulation occurs in 3-10% of pregnancies. Studies suggest that the prevalence of diabetes mellitus (DM) among women of childbearing age is increasing. This increase is believed to be attributable to more sedentary lifestyles, changes in diet, continued immigration from high-risk populations, and the virtual epidemic of childhood and adolescent obesity that is presently evolving everywhere.

Gestational diabetes mellitus (GDM) is defined as glucose intolerance of variable degree with onset or first recognition during pregnancy. Gestational diabetes mellitus accounts for 90% of cases of diabetes mellitus in pregnancy. Type II diabetes mellitus accounts for 8% of cases of diabetes mellitus in pregnancy, and given its increasing incidence, preexisting diabetes mellitus now affects 1% of pregnancies.

Infants of diabetic mothers experience double the risk of serious injury at birth, triple the likelihood of cesarean delivery, and quadruple the incidence of newborn intensive care unit admission. Studies indicate that the risk of these morbidities is directly proportional to the degree of maternal hyperglycemia. For this reason, the excessive fetal and neonatal morbidity attributable to diabetes in pregnancy should be considered preventable with early diagnosis and effective treatment therapies.

Gestational diabetes mellitus (GDM) is associated with increases in maternal and perinatal morbidity, including cesarean section, neonatal hypoglycemia, and, fetal macrosomia. Moreover,

human epidemiological and animal studies suggest that the intrauterine diabetic environment increases risk for hypertension, obesity, and type II diabetes in adulthood.

Intensive management of women with glucose intolerance during pregnancy has resulted in markedly improved outcomes in recent years. Despite these advances, care of the infant of a mother with diabetes continues to require vigilance and meticulous monitoring with a full understanding of the quality of glycemic milieu in which it developed.

AIM OF THE WORK

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To evaluate the relation between metabolic control and fetal outcome which will be assessed according to APGAR score, birth weight & NICU admission.

Statistical analysis will be done to correlate glycaemic control& fetal outcome.