Vulvovaginitis Among Diabetic Female Children

Thesis

Submitted in Partial Fulfilment

For The master Degree in Pediatrics

By

Amr Fares Ali

M.B.B.Ch, 1990

Ain Shams University

Supervised By

Prof. Dr. Mona Abd El Kader Salem

Prof. of Pediatrics

Ain Shams University

Dr. Sahar Mohamed Ahmed Hassanein

Lecturer of Pediatrics

Ain Shams University

Dr. Eman Mohamed kamel Abou El-Fetouh

Lecturer of Clinical Pathology

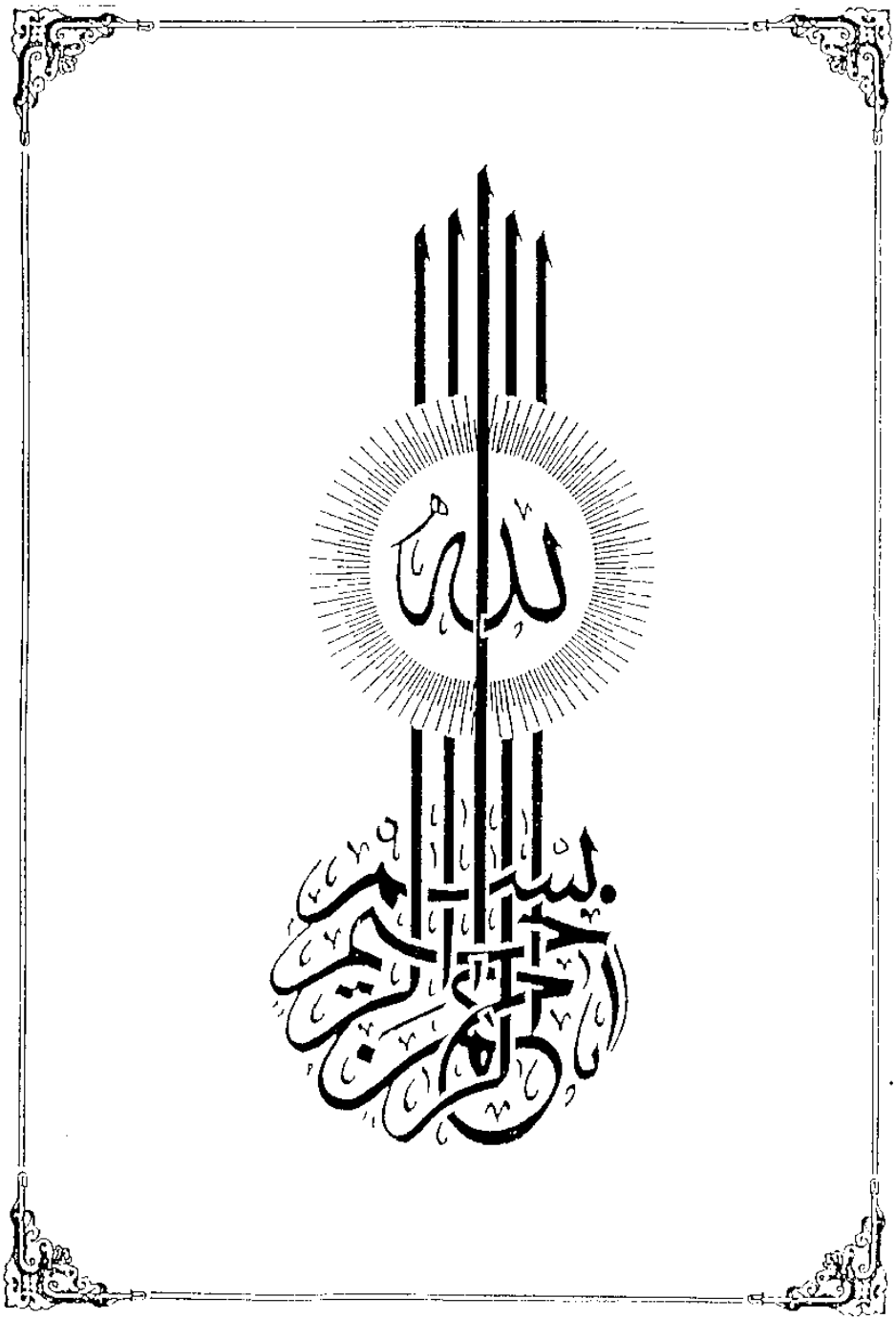
Ain Shams University

Faculty of Medicine

Ain Shams University

1995

وقل رب زدني علماً



ACKNOWLEDGEMENT

First, I thank ALLAH for granting me power to accomplish this work.

I would like to express my endless gratitude and appereciation to prof. Dr. Mona Abd El Kader Salem, professor of pediatrics, Ain Shams University for her valuable guidance and supervision throughout the whole work.

I wish to express my deep appreciation to Dr. Sahar Mohamed Hassanein lecturer of pediatrics, Ain Shams University for her kind help throughout this study.

I wish to express my thanks to Dr. Eman Mohamed Kamel lecturer of clinical pathology, Ain Shams University for her continuous supervision throughout this research work.

I am also very greatful to Dr. Safanez Habashy lecturer of pediatrics, Ain Shams University for her valuable advise throughout this study.

I also want to record my deep feeling of gratitude to my mother for her help and sacrifice.

I would like to thank my wife who suffered a lot with me and help me too much during completion this work.

Last but not least I wish to thank the patients and their mothers for their Co-operation

CONTENTS

Abbreviation

- D.M Diabetes Mellitus
- GDM Gestational Diabetes Mellitus
- HbA_{1c} Glycosylated hemoglobin
- IAA Insulin Auto-Antibodies
- ICA Islet Cell Autoantibodies
- IDDM Insulin Dependent Diabetes Mellitus
- IGT Impaired Glucose Tolerance
- MODY Maturity Onset Diabetes of Young
- NDDG National Diabetes Data Group
- NIDDM Non Insulin Dependent Diabetes Mellitus
- OGTT Oral Glucose Tolerance Test.
- Per. AGT Pervious Abnormality of Glucose Tolerance
- Pot. AGT Potential Abnormality of Glucose Tolerance.

List of Tables

Page

List of Figures

INTRODUCTION

AND

AIM OF THE WORK

INTRODUCTION AND AIM OF THE WORK

Glucose intolerance and diabetes may be caused by either inadequate insulin secretion or by impaired action of insulin on the tissues (Harold, 1984).

In 1980, the WHO expert committee on diabetes mellitus defined this disease as a state of chronic hyperglycemia (i.e. the state of having an excessive concentration of glucose in blood), Which may result from many environmental and genetic factors.

Diabetes is currently divided into 2 major forms, type (I) insulin dependent diabetes mellitus (IDDM) and type 2 Non insulin dependent diabetes mellitus (NIDDM). Most young persons who become diabetics are type I or IDDM.

In contrast, type 2 diabetes increases in prevalence with age (Fajans, 1978).

Insulin dependent diabetes mellitus (IDDM) is one of the most common serious diseases occuring in children and adolescents (Drash and Arslanian, 1990)

In Egypt, the prevalence of Insulin dependent diabetes mellitus among school children is 1,09 for 1000 (Salem et al., 1987)

Vulvovaginitis is in fact the commonest gynaecological disorder of childhood. It is commonly due to low virulence organisms rather than specific pathogenic organisms. Candida albicans plays a significant role in vulvovaginitis in diabetics or those on broad spectrum antibiotics (Forfar and Arneil, 1986).

The aim of the present work is to identify common pathogens causing vulvovaginitis in diabetic females and to study introital commencals of diabetics not complaining of symptoms of vulvovaginitis and to detect the effect of glycemic control on the frequency and cause of infection.

REVIEW OF LITERATURE

DIABETES MELLITUS

Definition:

Diabetes mellitus refers to a group of disorders that produces hyperglycemia as a prominent manifestation (Matthow, 1989). It is a heterogenous primary disorder of carbohydrate metabolism with multiple aetiological factors. All causes of this disorder ultimately lead to hyperglycemia (Olefsky, 1988). The state of chronic hyperglycemia is due to deficiency or diminshed effectiveness of insulin (Welborn, 1984).

The various types which constitute this group of disorders differ in their clinical behaviour, their epidemiological features and their pathological findings and thus most likely have a different aetiological causes and pathogenesis (Fajan et al., 1978).

- Diabetes mellitus is not a disease in the classical sense, but it is more or less a syndrome. (Anderiani et al., 1984).
- Diabetes is frequently associated with permanent and irreversible functional and structural changes in the cells of the body particulary of the vascular system. These complications affect most characteristically the eye. The kidney and the nervous system are considered to be a major part in the diabetic syndrome (Baird et al., 1977).