(PRENATAL SCREENING FOR HEPATITIS B VIRUS IN PREGNANT FEMALES AND ITS PERINATAL TRANSMISSION)

THESIS

SUBMITTED FOR THE PARTIAL FULFILLMENT

OF THE MASTER DEGREE IN OBSTETRIC AND GYNAECOLOGY

BY

ISLAM ATEYA SAKR

M. B., B. Ch.

UNDER SUPERVISION OF

DR. GAMAL ABDEL-SALAM WAFA

Ass. Prof. of Obstetric & Gynaecology

Faculty of Medicine

Ain Shams University

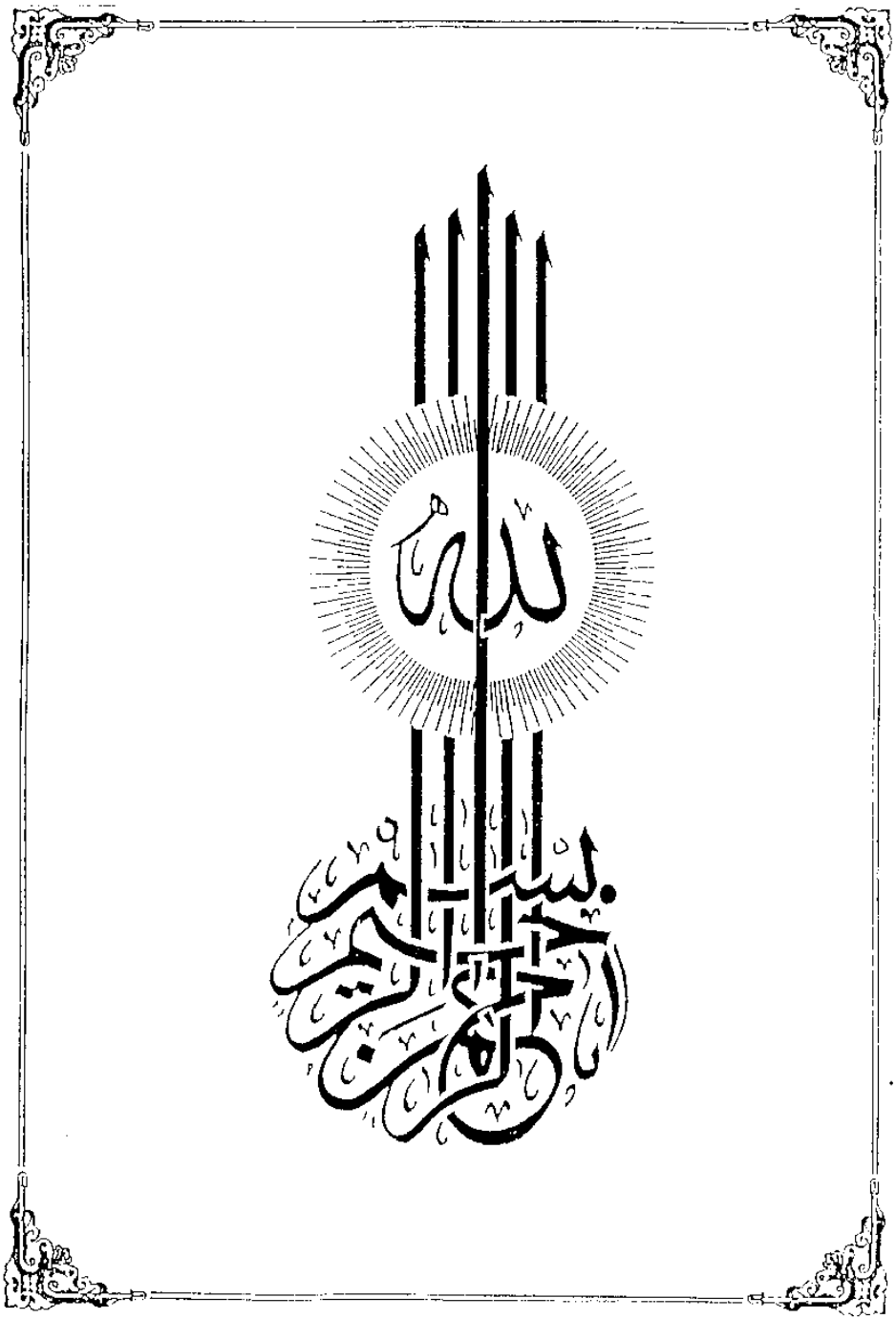
DR. MOHAMED ALAA MOHY EL-DIN EL GHANNAM

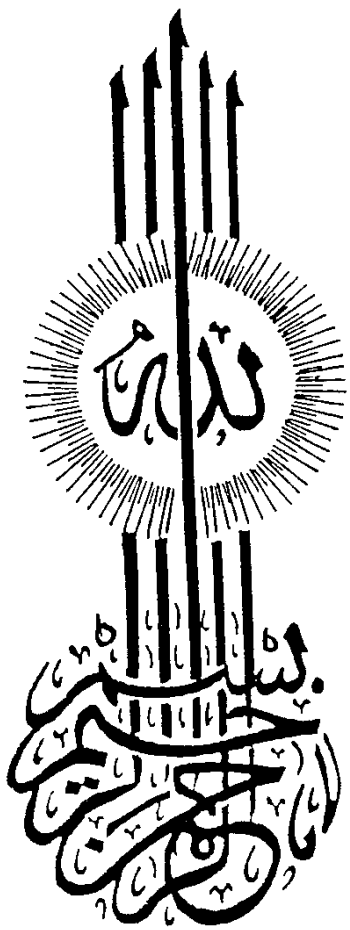
Lecturer of Obstetric & Gynaecology

Faculty of Medicine

Ain Shams University

1992





" يرفع الله الذين أمنوا منكم والذين أوتوا العلم درجات
والله بما تعملون خبير"

"صدق الله العظيم"

(سورة المجادلة - الآية ١١)

TO MY PARENTS

Acknowledgements

ACKNOWLEDGEMENTS

I wish to express my sincere appreciation to my supervisor, Dr. Gamal Abdel- Salam Wafa, for his keen supervision, generous co-operation and support.

Also, I wish to express my profound gratitude to Dr. Mohamed Alaa Mohy El-Din El-Ghannam for his kind supervision, and valuable advice throughout the work.

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Introduction

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Prenatal transmission of hepatitis B virus (HBV) represents one of the most efficient modes of HBV infection (Ernest et al., 1990).

Of all the hepatotrophic viruses, HBV is associated with the greatest world-wide morbidity and mortality. this is because of the ease of transmission and the potential for progression to a chronic infective carrier state. (Brown. et al., 1990).

The majority of HBV carriers world wide becomes infected by transmission from asymptomatic carrier mother to infant, so called "vertical transmission" or early person to person, so called "horizontal transmission" (Norkrans, 1990).

As hepatitis B virus infection and HBV associated diseases are prevalent in many parts of the Middle East and North Africa, post-natal horizontal childhood transmission appears to be the predominant method by which high hepatitis B carrier rates are maintained (Toukan. 1990).

So, the obstetrician- gynecologist, must be aware of the epidemiology and the pathophysiology of HBV infection, as well as strategies for treatment and prevention.

Physicians must first realize that their profession places them in a high risk group, by definition, therefore, pre-exposure prophylaxis (That is, vaccination) is a logical step to take early in a medical career, moreover, familiarity with guide lines for global hepatitis B surface antigen (HBsAg) screening of pregnant women to prevent the serious pediatric hepatic morbidity that results from perinatal transmission of the virus is of paramount importance (Pastorek, 1989).

Therefore, screening of all pregnant women is necessary to identify those HBsAg positive women capable of transmitting the HBV to their infants so as to provide immunoprophylaxis to the infants at risk of perinatal infection, this policy is necessary to prevent perinatal transmission of hepatitis BV and is cost effective (Greenspoon et al., 1989).

Aim of the work

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This is a prospective study to screen asymptomatic carrier pregnant mothers for HBsAg and perinatal transmission trying to conclude that only routine prenatal screening will identify all infants at risk of perinatal hepatitis B virus infection and that a comprehensive public health program involving central laboratories, private physicians and public health staff can be highly effective and efficient in protection against hepatitis B.

Therefore we will try to give an answer to some questions.

* Should all pregnant women be screened for HBsAg? consequently, is universal screening for HB infection warranted in all prenatal population?
* Is mass immunization to be initiated prior to one year of age?
* What about vaccination of high risk group?

Review of the literature