HABITUAL ABORTION

THESIS

Submitted in Partial Fulfilment of the Requirements

For Degree of M.S.

(GYNAECOLOGY & OBSTETRICS)

By

HUSSEIN MOHAMED HUSSEIN

M. B. B. Ch

Supervised by

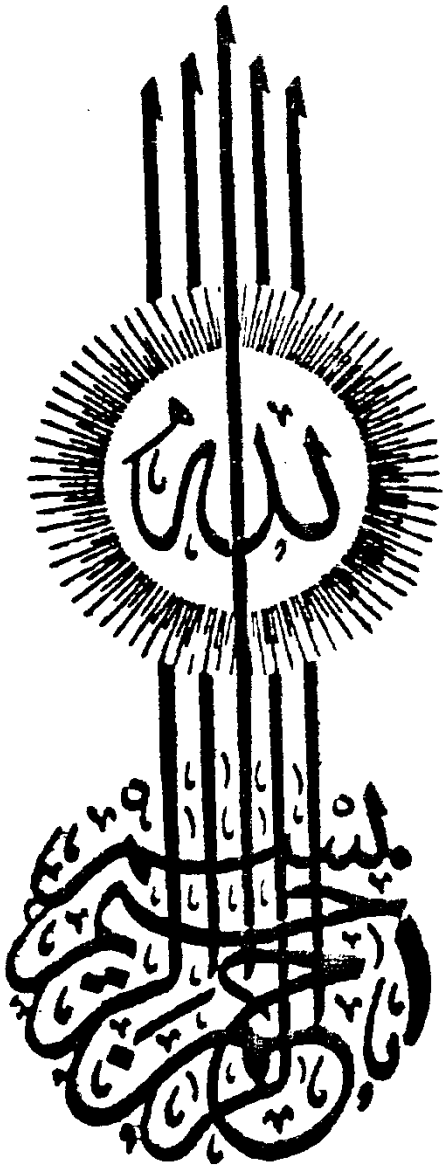
Prof. Dr. ALY MAREY MAKHLOUF (M.D.)

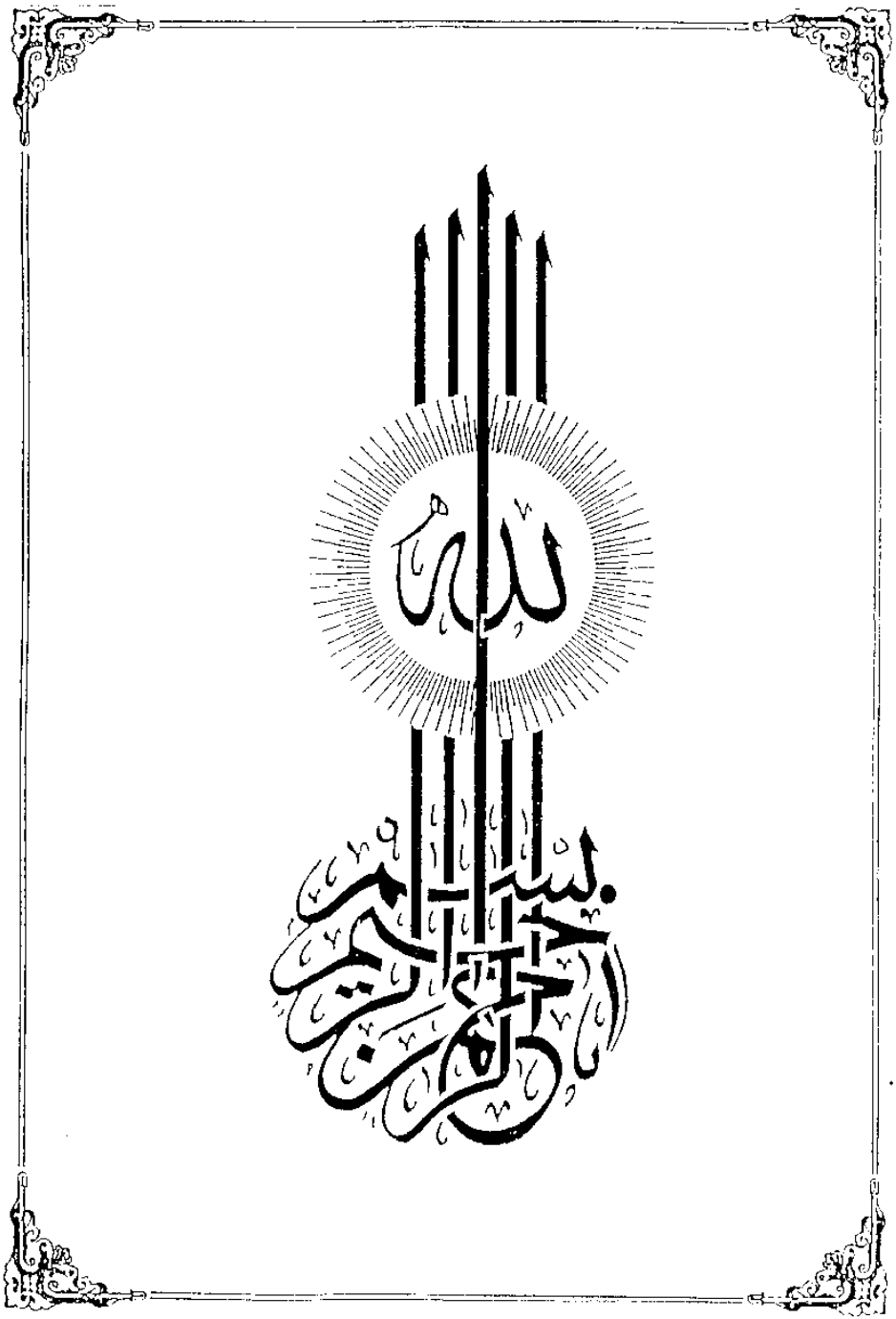
A. Prof. Dr. AHMED GALAL EL LAITHY (M.D.)

Faculty of Medicine

Ain Shams University

1980





TO :

MY BELOVED MOTHER AND WIFE

ACKNOWLEDGEMENT

I would like to express my immense gratitude and appreciation to Professor Dr. Aly Marey Makhlouf for his guidance and encouragement.

I also extend my most profoud gratitude and appreciation to A. Professor Dr. Ahmed Galal El Laithy for his kind supervision and valuable help throughout the whole work.

Hussein M. Hussein

(CONTENTS)

CONTENTS

	Page
. INTRODUCTION	1
. AETIOLOGY	4
. Defective Germ Plasm ...	7
. Thyroid Insufficiency ...	12
. Luteal Phase Defect ...	14
. Maternal Infections ...	26
. Syphilis ...	26
. Toxoplasmosis ...	29
. Mycoplasma ...	31
. Brucellosis ...	31
. Rubella	32
. Herpes Virus Hominis	32
. Cytomegalo Virus ...	33
. Nutritional Disorders ...	34
. Psychological Disorders ...	35
. Other Maternal Diseases ...	37
. Cervical Incompetence ...	39
. Congenital Anomalies Of The Uterus and Hypoplasia ...	54
. Fibromyoma Of The Uterus	62
. Backward Displacement Of The Uterus	64
. Asherman's Syndrome ...	65
. Immunological Factors ...	68
. DIAGNOSIS	70
. TREATMENT	75
. AIM OF THE WORK	76
. MATERIAL & METHODS ...	77
. RESULTS	78
. DISCUSSION	91
. SUMMARY	99
. REFERENCES	104

(INTRODUCTION)

INTRODUCTION

The term abortion designates the termination of pregnancy before the foetus has reached viability. Abortion should be used to apply only to the process of expulsion of a nonviable foetus and not to the foetus itself, which should be called on abortus. (Greenhill 1974).

device 500 gm

Viability varies from a point of view of one auther to another, for example, Behrman and Kistner (1968) considered that the criteria of viability are based on duration of pregnancy (20 weeks or less) and the length of the foetus (35 cm. from crown to heel) or its weight (1000 gm or less). Eastman (1966) considered 400 gm (13.5 ounces) as the upper limit of abortuses, while Greenhill and Friedman (1974) considered 500 gm (17 ounces) as the upper limit of abortuses.

Certain abortions are caused by chance factor; others by factors which are persistant or recurrent in every pregnancy for which a particular couple are responsible. The more abortions a woman has, the more likely is a recurrent factor to be at work, but until she has miscarried three successive pregnancies that the observed chance of abortion in a subsecuent pregnancy rises significantly. (Jeffcoate, 1975).

Spontaneous abortion is a very common event and accounts for the greater part of foetal wastage. While the figure commonly quoted as the incidence of spontaneous abortion is 15 percent of pregnancies the true figure obviously is higher than that because many abortions occur in the first weeks after conception and are considered to be delayed or profuse menstruation. (Parsons - Sommers 1978).

United Nations (1954); Tietze (1953) estimated that spontaneous abortion is 10 percent of all pregnancies, but the higher estimates "15 percent of all pregnancies" receive support from the findings of Donald's group (1967), those of Hellman and Co-workers (1969) and of others who by ultrasonic techniques have independently described a surprisingly high incidence of early abnormal gestations. (William's Obstetrics 1976).

Habitual abortion is premature spontaneous termination of at least three consecutive pregnancies with or without preceeding successful confinment i.e primary or secondary habitual abortion (Tupper, Weil 1968). The former group represents nulliparas who have had no premature or full term delivery prior to the occurance of these sequential abortions, the later are multiparas whose consecutive abortions has been

preceeded by one or more premature or full - term birth. (Mazer, Israel 1959). It should be evident that any woman who aborts is potentially a habitual aborter, therefore it is important that the first abortus of any patient should be throughly examined for pathologic changes. Habitual abortion constitutes less than 4 percent of all spontaneous abortions. (Hertig.A.T. 1958).

Malpas (1942) attempted a theoretical calculation of the probability of a successful pregnancy ofter one, two, three, or more abortions. While his reasoning appeared correct it has beer shown by Goldheizer and Donigo (1958) and others that his estimates were based on faulty assumptions.

Malpas attempts of calculation of successful pregnancy after one, two, three successive abortions

No. of successive abortions	one abortion	two successive abortions	three successive abortions
Spontaneous cure rate	88.8 %	84.2%	72.4 %

Modern reports of Pitkin, Zlatnik (1979) reported that the risk of abortion after 3 successive abortions is 32% and after 2 successive abortions is 26% and after one abortion is 24%.

(AETIOLOGY)

habitual missed abor.

AETIOLOGY

In practice and without special investigations, it is impossible to ascribe a cause with any certanity in the majority of cases. There are many possible causes for abortion and more than one may operate at a time.

In early weeks, the death of the foetus, often preceeds the expulsive action of the uterus, and seems to be the precipitating factor for abortion. Later in pregnancy the foetus is more often born alive and abortion then appears to be caused by some errors in the uterus or its behaviours. Some of the latter abortions, begin by rupture of the membranes (Jeffcoate. 1975).

There is a natural inclination to assume that the cause of recurrent abortion is primarily one of hormonal deficiency, and in certain instances the basic fault may actually be an inadequate production of progesterone either by the corpus luteum of the ovary in the early phases of pregnancy or by the placenta in the later stages of pregnancy. There seems to be a general agreement that the number of cases where endocrine inadequacy is the basic fault are rather few. If this is true, hormonal replacement

therapy, which is being so widely used for this condition, has a small chance of success (Parsons , Sommers 1978).

Pritchard and Mac Donald (1976) reported that the causes of habitual abortion include hormonal abnormalities, nutritional factors, infections, incompatible blood, psychological factors, anatomical uterine defects and incompetent cervix.

Novak (1975) classified the causes into genetic factors, anatomical uterine and cervical defects, luteal phase defects, infections, blood incompatibility and sperm defect.

Tupper and Weill (1968) reported that the causes include defective germ plasm, mechanical factor, hormonal factor (thyroid insufficiency - luteal phase defect), nutritional factor, psychological factor and immunological factor.

The aetiological factors can be classified as follows :

(I) Defective germ plasm

(a) Male causes

(b) causes in the ovum

(II) Maternal factors

(a) General causes :

1- Endocrine disorders (thyroid insuffi - ciency, luteal phase defect, inadequate corpus luteum of pregnancy and placenta).

2- Infections (Syphilis, toxoplasmosis , mycoplasma, herpes virus hominis, rubella, brucellosis, cytomegalo virus).

3- Nutritional disorders.

4- Psychological factors.

5- Other maternal diseases (hypertension, chronic nephritis, maternal diabetis).

(b) Local causes

1- Cervical incompetence.

2- Congenital anomalies of the uterus.

3- Fibromyoma of the uterus.

4- Backward displacement of the uterus.

5- Asherman's syndrome.

(III) Immunological factors

- Blood group incompatibility.