HYSTEROSCOPIC RESECTION OF INTRA-UTERINE SEPTUM

THESIS

Submitted for partial fulfillment of
Master Degree in Obstetrics and Gynecology

By

Mohamed Ashraf Mohamed Alaa El-Din Elewa El-Gammal

M.B.,B.Ch. (Ain Shams University)

Supervised By

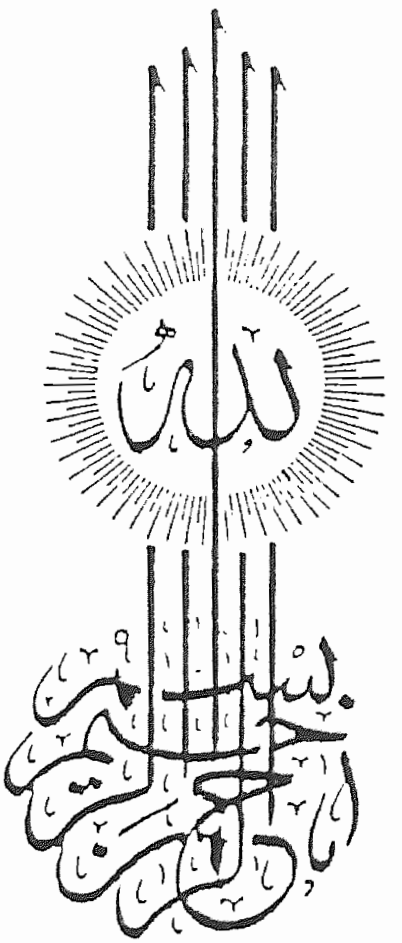
Prof. Dr. Mohamed Bayoumy Sammour

Prof. of Obstetrics and Gynecology
Faculty of Medicine
Ain Shams University

Dr. Mounir Mohamed Fawzy El-Hao

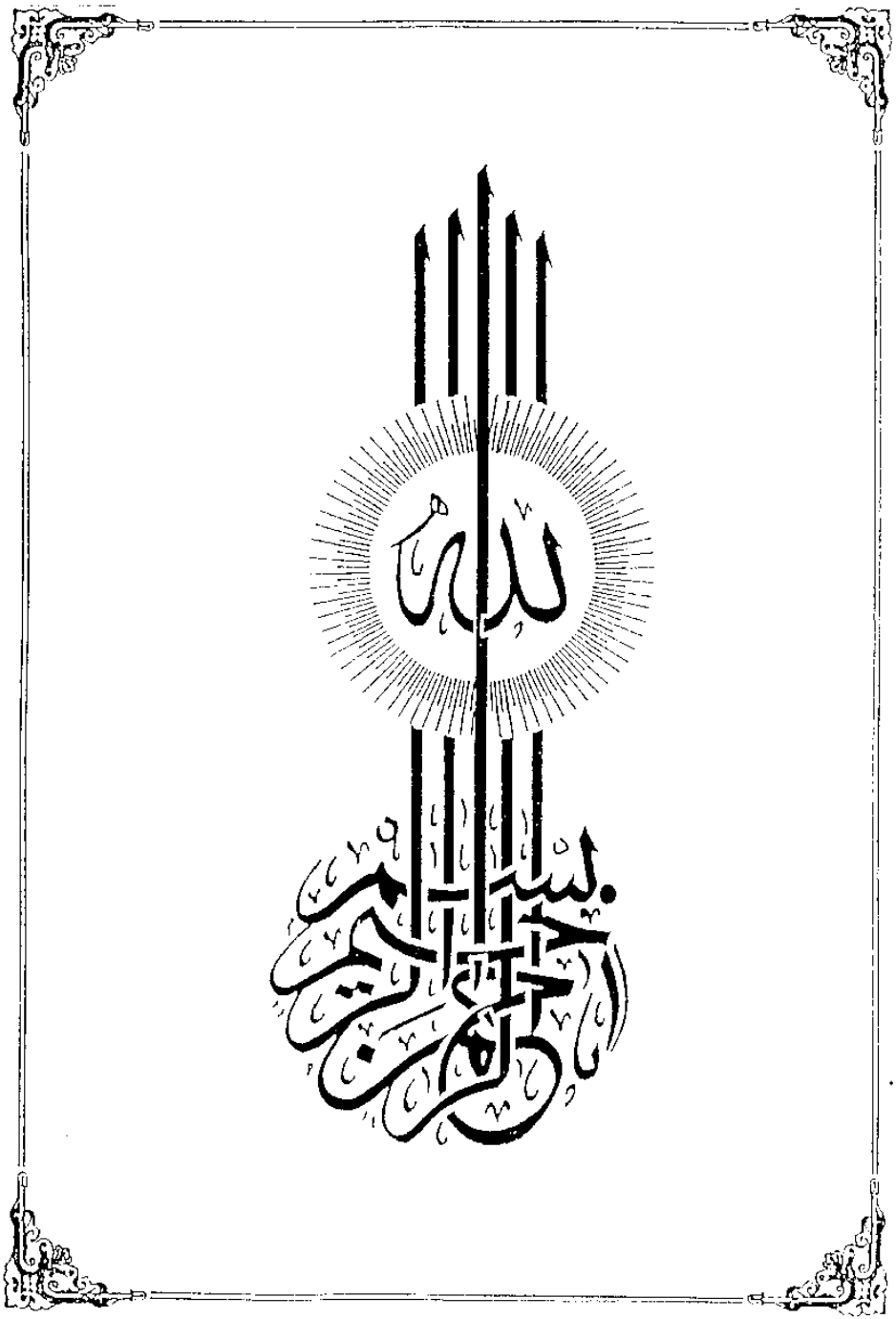
Assist. Prof. of Obstetrics and Gynecology
Faculty of Medicine
Ain Shams University

Faculty of Medicine
Ain Shams University
1993



قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا
عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ .

صدق الله العظيم
البقرة - ٣٢ -



TO...

MY SONS

ACKNOWLEDGEMENT

I would like to express my deepest gratitude to Prof. Dr. Mohamed Bayoumy Sammour, Prof. of Obstetrics and Gynecology, Faculty of Medicine, Ain Shams University, for his most kind support and guidance in every way. His most kind fatherhood has been always overhelming.

I am deeply grateful to Dr. Mounir Mohamed Fawzy El-Hao, Assist. Prof. of Obstetrics and Gynecology, Faculty of Medicine, Ain Shams University, he gave me much of his time and experience, keenly supervised my work and guided every step till it was completed I do owe him a lot.

Last but not least, I would like to thank all the staff members of the early cancer detection unit, Ain Shams University, for all the help they offered.

CONTENTS

INTRODUCTION

INTRODUCTION

Septate uterus is associated with a high incidence of reproductive failure and obstetrical complications, ranging from first and second trimester habitual (reptetive) abortions, premature delivery, abnormal fetal presentation, intrauterine growth retardation, and infertility. About 15 to 25 per cent of spontanous abortions are caused by mullerian fusion defects and almost all are associated with uterine septa. *(Hassiakos and Zourlas, 1990).*

The cause may involve implantation of an embryo onto an avascular septum that is unable to support adaquate growth *(De Cherney, 1986).*

Although, hysterosalpingography seems of great value in diagnosing uterine septum, hysteroscopy afford more precise informations concerning the degree of fundal anomaly *(Sorensen, 1987).*

Hysteroscopic resection of a uterine septum almost has replaced the traditional transabdominal approach. Advantages over the former are that it can be performed on an outpatient basis, requires minimal recovery time before allowing

pregnancy, and does not commit the patient to a cesarean section *(Edstrom, 1979), (Valle, and Sciarra, 1986) and (Fayez, 1986).*

The gestational outcome of hysteroscopic resection of uterine septa, equal or exceeds that achieved by transabdominal metroplasty *(Perino et al., 1987).*

AIM OF THE WORK

AIM OF THE WORK

The purpose of this work is to evaluate the accuracy of anatomical correction of the uterine septa using the knife diathermy via hysteroscopic control.

REVIEW OF LITERATURE

EMBRYOLOGICAL DEVELOPMENT OF THE MULLERIAN DUCT

In the sixth week of development, the embryo has two pairs of genital ducts:

The mesonephric or Wollfian ducts, extending from the mesonephros to cloaca, and the paramesonephric or Mullerian ducts, which run parallel to the wollfian ducts. *(Jan Langman, 1977).*

The Mullerian duct arises as a longitudinal invagination of the coelomic epithelium on the anterolateral surface of the urogenital ridge. Cranially, the duct opens in the coelomic cavity with a funel-like structure. Caudally, it runs first lateral to the mesonephric duct but then crosses it ventrally to grow in caudomedial direction.

The mullerian duct will be further divided into three segments a cranial longtidunial segment, an intermediate transverse part and caudal longtidunal part *(Hamilton et al., 1978).*

The fallopian tubes will be formed on each side from the cranial longitudinal portion while the coelomic opening develops into the future fimbria. The caudal longitudinal segments fuse together and form the cervix uteri, while the intermediate unfused portions expand and get incorporated into the uterus forming the fundal part of the organ *(Williams and Smith, 1976).*

Fusion and incorporation may be incomplete resulting in different forms of congenital anomalies *(Williams and Smith, 1976).*

The caudal tip of the combined ducts projects into the posterior wall of the urogential sinus, where it causes a small swelling, the paramesonephric or Mullerian tubercle *(Sadler, 1985).*

The Mullerian duct comes to full development, forming the oviducts and the uterus, while the wolffian duct disappears except for a few remnenant *(Jan Langman, 1977).*

The fused paramesonepheric ducts are surrounded by a layer of mesenchyme, with time, this mesenchyme forms the muscular coat of the uterus, the myometrium and its peritoneal covering, the peritonium *(Sadler, 1985).*