COMPARATIVE STUDY BETWEEN CYTOLOGY, HISTOPATHOLOGY AND ENDOSCOPY OF ENDOMETRIAL LESIONS

THESIS
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M. D. Degree in
Obstetrics & Gynaecology

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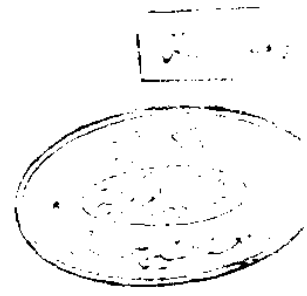

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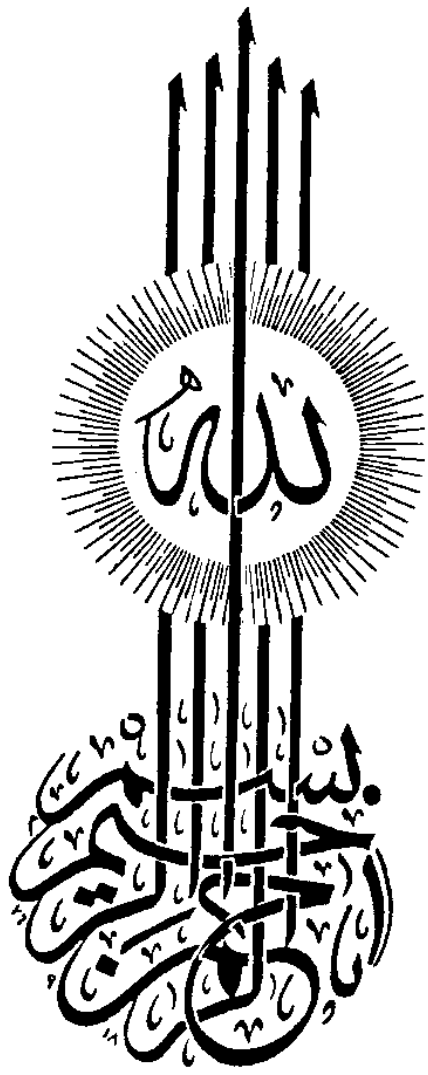

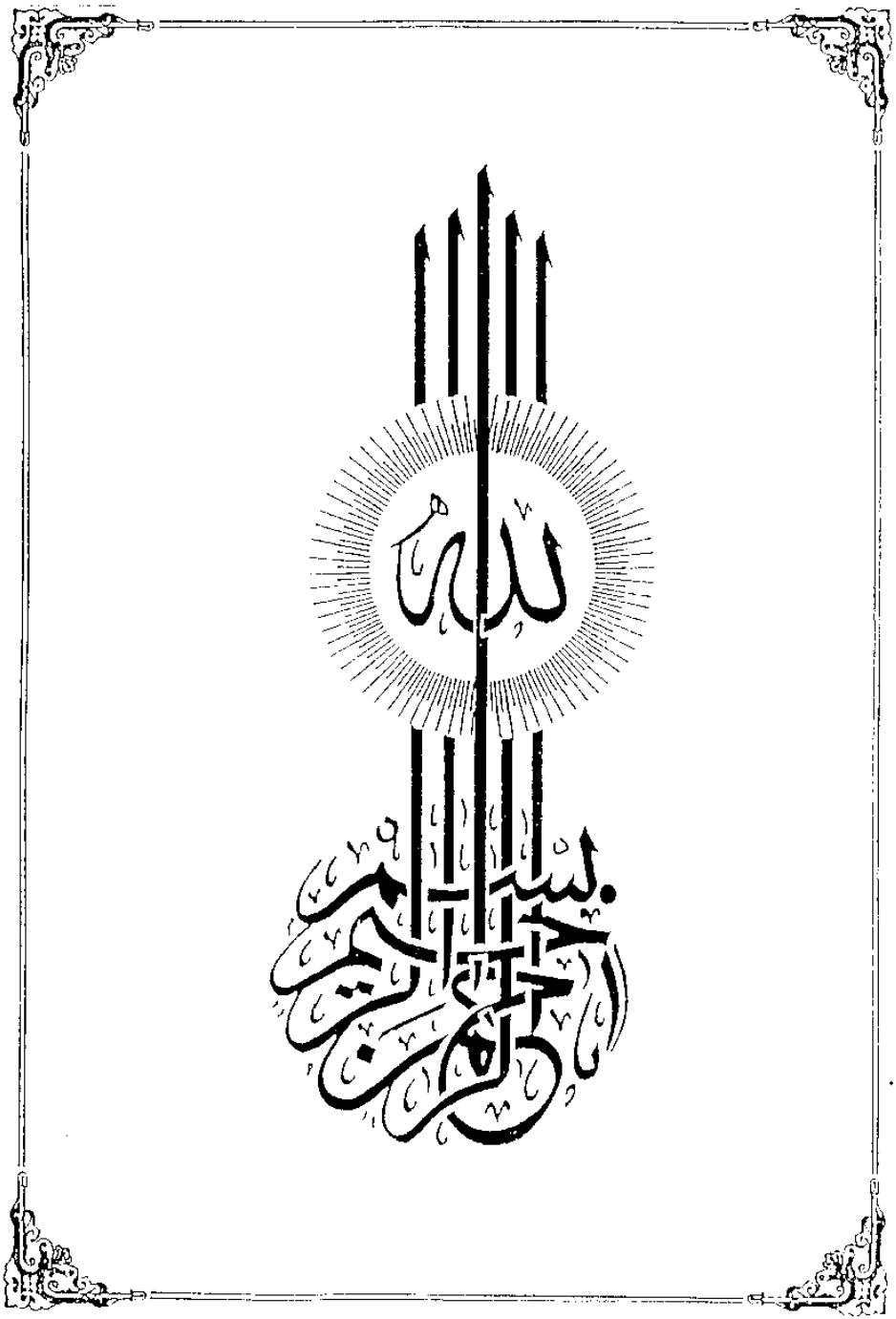

TO

My Mother,
My Wife,
and My Lovely
Kids Amr & Dina

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INTRODUCTION

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The history of the uterus and women's role in society is fascinating, and a great deal more could be said about it. Paracelsus called the uterus "the smallest microcosm" in which all human life is reproduced, contrasting it with the macrocosm or "great womb" where life in its totality is enacted. And the medieval humanist Buonaccioli said of this unique female organ, "of all the miracles which the human body shows us, none is more marvelous and admirable than the womb of the woman, from whence man in all his wondrous complexity, is most ingeniously derived" (Lindemann, 1984).

Therefore, Gynaecologists and Obstetricans had done all their efforts to study and understand all about this unique organ. Examination of the uterus and its cavity has been taken by a variety of methods using either indirect tactile sensation (Forceps, Sounds, Curretts) or direct manual, i.e., digital palpation. Hysterosalpingography also has provided a valuable adjunct to observe the architecture and symmetry of the uterine cavity in order to rule out topographic abnormalities but certainly, the logic of looking into

the uterine cavity seems irrefutable (Siegler and Lindemann, 1984).

Direct visualisation of the uterine cavity can only be effectively accomplished by hysteroscopy which is an endoscopic procedure utilizing a fiberoptic telescope and usually a method to distend the uterine cavity for the purpose of examining it and the endocervix in selected patients (Siegler, 1984). Its worth is being documented in several areas of gynaecologic practice (Hamou and Taylor, 1982). Three differing, but complementary, techniques are evolving. The most widely employed is conventional panoramic hysteroscopy. The principle is simple, involving visualization of the uterine cavity which has been distended with a liquid or gaseous medium.

Contact hysteroscopy is simpler to perform and does not require uterine distension, but it requires more experience in the interpretation of the findings. As its name implies, contact hysteroscopy is performed with the objective lens in contact with the structure under scruting.

Microhysteroscopy and microcolpohysteroscopy are performed with a system of magnifying lenses built into

the telescope. These procedures permit observation of the superficial cellular layer of the cervical canal and uterine cavity at varying magnifcations (Hamou, 1982).

A recently developed instrument has the capability of permitting panoramic hysteroscopy, contact hysteroscopy and microcolpohysteroscopy (Hamou, 1980).

The most common indications for hysteroscopy is the evaluation of unexplained abnormal uterine bleeding in premenopausal or postmenopausal patients (Siegler, 1984).

A rapid and correct diagnosis of the cause of uterine bleeding obviously results in earlier and better treatment.

Dilatation and curettage has long been considered the method of choice for investigating abnormal uterine bleeding and for obtaining samples of endometrium for histologic examination. Although most gynaecologists maintain that dilatation and curettage is byfar the most reliable technique for diagnosing endometrial abnormalities, the sensitivity and specificity of dilatation and curettage are difficult to assess, because unless the uterus is removed, the true incidence of

lesions in the uterus is unknown. Many experienced gynaecologists reported that a dilatation and curettage may miss focal intrauterine lesions because they are either small or located in a difficult area to curette (Milton H. and Alfred, 1985; Siegler, 1984 and MacKenzie and Bibby, 1978).

Stock and Kanbour evaluated the completeness of the curettage performed immediately before hysterectomy. They found that in 60% of the patients, less than half of the uterine cavity was curetted and in 16% of the specimens less than one fourth of the cavity had been curetted (Stock and Kanbour, 1975). Therefore, one should anticipate a failure rate with some conventional curettages and is not unusual to miss endometrial polyps submucous myomas, or small endometrial carcinomas at routine currettage.

Although hysteroscopy can localize and delineate macroscopic findings, it never competes with a tissue diagnosis. The two techniques are complementary and improve the access to information.

Other indications for hysteroscopy include the location and retrieval of "Lost" Intrauterine contraceptive devices, the evaluation of the infertile patient

who has abnormal hysterogram, the diagnosis and therapy of intrauterine adhesions, the exploration of the internal os and uterine cavity in patients who have had repeated abortions, the removal of pedunculated submucous myomas and endometrial polyps and the transection of small septa possibly under laparoscopic control (Siegler, 1984).

Experience with hysteroscopy will increase the operator's skill and confidence of interpretation. But observations of suspicious areas must be accompanied by biopsy.

AIM OF THE WORK

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Hysteroscopy as a diagnostic procedure, can diagnose gross lesions of the cavity. Also at the microscopical level, the pattern of the endometrium can be evaluated, not precisely as the histopathology but, at least an overall idea can be obtained by hysteroscopy differentiating an atrophic, normal from hyperplastic endometrium.

The aim of this work is to correlate the hysteroscopic findings in different pathological lesions of the endometrial cavity with the outcome by endometrial aspiration cytology and the histopathology of the endometrium as obtained either by curettage or by examination of the hysterectomy specimens.

Also, our aim is to assess the accuracy of hysteroscopy in diagnosing endometrial lesions in relation to other methods of diagnosis.

Our main interest was focused on the pathology of uterine haemorrhage in its different clinical presentations.

REVIEW OF LITERATURE