EVALUATION OF ENDOCERVICAL ASPIRATION AND CURETTAGE IN DIAGNOSIS OF CERVICAL PATHOLOGY

THESIS

SUBMITTED FOR THE DEGREE OF
PH.D. (PATHOLOGY)

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1987

ACKNOWLEDGEMENT.

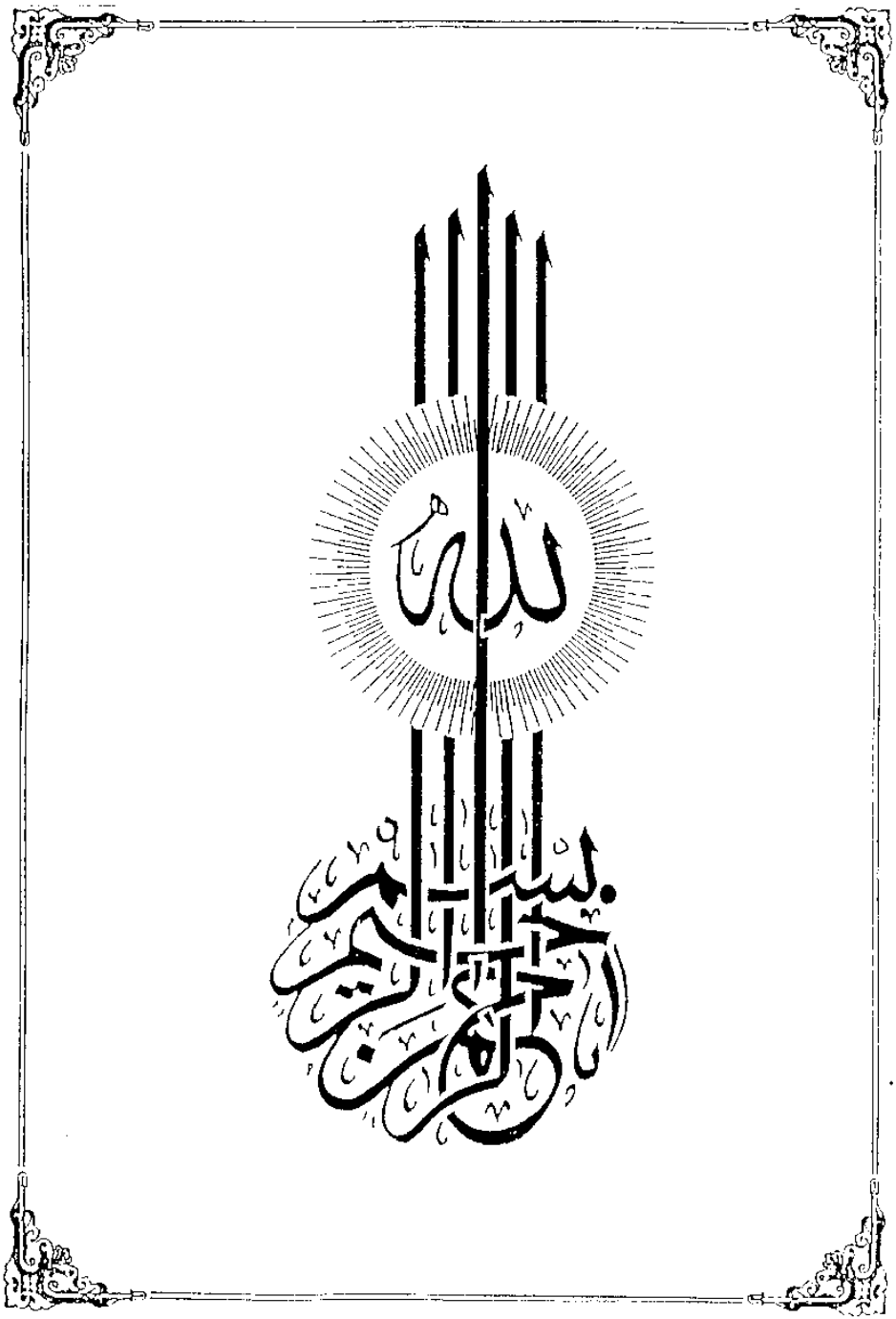
I wish to express my profound gratitude and to offer my particular thanks to Prof. Dr. MOURAD A. SHERIF, Professor of pathology, for his valuable advice, kind help and constant support.

It is with great difficulty that I endeavour to thank my Prof. Dr. M. B. SAMMOUR, Professor of Obstetrics and Gynaecology, for his expert guidance, continuous sincere encouragement, stimulating suggestions and valuable advice which were essential for my work to be finally achieved.

I am deeply thankful and grateful to Dr. NADIA BAYOUMI, Assistant Professor of Pathology, for her unlimited help, continuous supervision and valuable directions. She gave me generously of her time and help throughout the period of this work.

I would like also to thank Dr. MOHAMMAD EL SHAWARBY, Assistant Professor of Pathology, for his valuable criticism, kind help and encouragement.

I also record my thanks to the Staff of the Cyto-diagnostic unit, for their cooperation.



CONTENTS

INTRODUCTION AND AIM OF WORK

INTRODUCTION

Of all cancers of the female genital tract, carcinoma of the cervix is the leading cause of morbidity and mortality.

Within recent years, the precursor stages of carcinoma of the uterine cervix have received a great deal of attention as a possible model of human cancerogenesis.

Our goal should be the elimination as much as possible of unnecessary diagnostic procedures which add to the possibility of complications but do not add to the accuracy of the study.

Nowadays by the development of outpatient accurate methods of investigation; such as colposcope, directed punch biopsy and endocervical curettage, we can determine the degree of cellular anaplasia without the use of more traumatic procedures as conization. However, there are instances in which cone biopsy is necessary as when there are wide divergence in the results of the outpatient diagnostic procedures.

The precursor stages of cancer cervix have no typical gross picture. Most of the changes are found in the chronically infected and lacerated cervix. When eversion is present, the commonly involved squamocolumnar junction or transformation zone is readily available for cytologic and histologic sampling and visible by colposcope. Nevertheless, in a percentage of cases especially those of old age, this critical area is usually not visible to the naked eye. In such instances, the endocervical specimen, for either cytologic or histologic study, is of major importance.

Recently, there is recognized increase in the frequency of cervical adenocarcinoma and the available data indicate that the neoplasm may exist in the presence of a normal appearing cervix. While the colposcope is of proven value in the detection of cervical squamous cell carcinoma and its precursors, there is only limited information about its usefulness in the detection of adenocarcinoma. So in an attempt to increase the detection of adenocarcinoma and its precursors, we recommend a routine sampling of the endocervical canal by both endocervical cytology and curettage.

AIM OF THE WORK:

The aim of this work is to evaluate the contribution of endocervical aspiration and curettage in diagnosis of endocervical intraepithelial neoplasia, microinvasive, or frank invasive carcinoma.

REVIEW OF LITERATURE

REVIEW OF THE LITERATURE

EMBRYOLOGY OF THE CERVIX

According to Slavin (1976), The Fallopian Tubes, body of the uterus, cervix and the upper three fourths of the vagina develop from the mullerian ducts.

However, the lower one fourth of the vagina develops from the urogenital sinus which arises from the lower end of the endodermal duct (The Gut).

The cervix and upper Three fourths of the vagina are initially lined by columnar epithelium of mullerian origin, while the lower one fourth of the vagina which arises from the urogenital sinus is lined by stratified squamous epithelium. By the fifth intrauterine month, the stratified squamous epithelium moves headwards and replaces the columnar epithelium, so that the whole vagina becomes lined by stratified epithelium, and the squamo columnar junction moves to lie at a point across the vaginal cervix . In 4% of the women, the squamocolumnar junction lies at the fornices.

During late intrauterine life and mainly during adolescence and first pregnancy, the original columnar epithelium which lies on the vaginal cervix is

transformed into stratified squamous epithelium, thus a new squamocolumnar junction develops and usually lies at the external os. The area of the vaginal cervix which is covered by this metaplastic epithelium is called The Transformation Zone (T.Z). It is believed that the vaginal acidity which results from ovarian hormones is the stimulus for this physiological metaplasia.

The adult cervix is covered by three types of epithelium :

1. Original squamous epithelium.
2. Original columnar epithelium.
3. Metaplastic squamous epithelium..

ANATOMY OF THE CERVIX

Singer and Jordan (1976) stated that the cervix is the lower part of the uterus, and is divided from the upper part, or corpus, by a fibromuscular junction, usually referred to as the internal os, which marks the junction between the muscular corpus and the fibrous cervix.

The cervix is basically cylindrical, 3cm in length and about 2.5cm in diameter in the nuligravida. In the multiparous women, the cervix is larger and more bulbous with an external os rather horizontal than circular.

The cervix projects through the anterior wall of the vagina at the vaginal vault, as a result of which there is an upper supravaginal portion and a lower vaginal portion approximately of the same length. The vaginal mucosa is reflected around the front, sides and back of the cervix forming the vaginal fornices.

The vaginal cervix has both an anterior lip and a posterior lip. The anterior lip is shorter than the

posterior lip due to the oblique line of reflection of the vaginal mucosa.

The endocervical canal joins the uterine cavity with the vagina; it is continuous with the uterine cavity above at the level of the internal os, and with the vagina below at the level of external os.