THE CYTOLOGIC DETECTION OF UTERINE CANCER AND ITS PRECURSORS BY THE ENDOPAP DEVICE

A COMPARISON OF THE ENDOPAP WITH

CURETTAGE OR HYSTERECTOMY, 11 State of the state

THESIS

Submitted in Partial Fulfillment for The Degree of

M.D.

In Obstetrics and Gynecology

Ву

Gamal Farag Moustafa

M.B., B.Ch., M.Sc. (Obs. & Gyn.)
Ain Shams University

616.99466

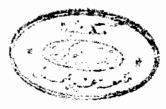
Supervised by

Prof. Dr. SOBHI KHALIL ABOU-LOUZ Professor of Obs. & Gyn., Ain Shams University

Prof. Dr. SAIED MOHAMED TOHAMY Prof. of Obs. & Gyn., Ain Shams University

Dr. MAGDA MOHAMED ABDEL SALAM
Lecturer of Pathology

Faculty of Medicine Ain Shams University 1993



51076





To my Dear Wife

and

My Lovely Son "Omar".

ACKNOWLEDGEMENT

I wish to express my gratitude to Professor Dr. SOBHI KHALIL ABOU-LOUZ, Professor of Obstetrics and Gynecology, Ain Shams University, for his help and encouragement all through my career.

I feel deeply indebted to Professor Dr. SAIED MOHAMED TOHAMY, Professor of Obstetrics and Gynecology, Ain Shams University, for his keen and cordial support and valuable remarks.

My thanks are also due to Dr. MAGDA MOHAMED ABDEL SALAM, Lecturer of Pathology, Ain Shams University, for her considerate help and assistance throughout this work.

Tribute must be paid to THE STAFF OF THE EARLY CANCER DETECTION UNIT, Department of Obstetrics and Gynecology, Ain Shams University, their role in the preparation and processing of the samples cannot be overestimated.

All my thanks are due to THE MEDICAL STAFF of The Department of Obstetrics and Gynecology for their enthustiastic help all through the collection of the material of this work.

Last but by no means least, I thank MY COLLEAGUES AND THE MEMBERS OF THE NURSING STAFF at Ain Shams Maternity Hospital.

CONTENTS

	rage	
Introduction	1 3 4 26 36 51 68 85	8 è
Material and Methods	130	- J 🔾
Results	137	
Discussion	162	-
Recommendations	18 4	
Summary	186	
References	190	
Arabic Summary		

LIST OF TABLES

Table	Title	Page
No.		
1	Major histological features of the human endometrium during an	21
	ideal 28-day cycle.	
2	Endometrial hyperplasia and endometrial carcinoma	53
3	Classification of endometrial carcinoma	68
4	Relative frequency of cell subtypes of endometrial carcinoma	70
5	Results of Gravlee jet-wash devices	122
6	Indications for curettage or hysterectomy	137
7	Age distribution of 100 examinees	139
8	Epidemiologic characteristics of 100 patients	141
9	Adequacy of pathological samples in relation to the operation	142
10	Adequacy of cytological and pathological samples	144
11	Adequacy of cytological and pathological samples correlated to	146
	menopause	
12	Results of cytodiagnosis of 87 adequate Endopap samples	148
13	Results of histopathological diagnosis of 90 adequate specimens	150
14	Correlation of final histopath. results with preoperative diagnosis	152
15	Pathological findings in relation to age groups	153
16	Cytologic and histologic correlation for 90 cases	154
17	Clinical and histopathologic data on 11 cases with endometrial	156
	hyperplasia correlated with accuracy of cytologic detection	
18	Analysis of 4 suspicious cytologic smears by Endopap	157
19	Clinical and histopathologic data on 5 cases with endometrial	158
	carcinoma	
20	The Vuopala Survey of the literature in 1977	175
21	Studies on Endopap endometrial sampler	177

LIST OF FIGURES

Fig. No.	Title	Page
ì	Endopap Endometrial Sampler	132
2	Indications for curettage or hysterectomy	138
3	Age distribution of 100 examinees	140
4	Adequacy of pathological samples in relation to the operation	143
5	Adequacy of cytological and pathological samples	145
6	Adequacy of cytological and pathological samples correlated to menopause	147
7	Results of cytodiagnosis of 87 adequate Endopap samples	149
8	Results of histopathological diagnosis of 90 adequate specimens	151
9	Cytologic and histopathologic correlation for 90 cases	155
10	Cytologic picture of secretory endometrium	159
11	Cytologic picture of proliferative endometrium	159
12	Cytologic picture of postmenopausal inactive endometrium	160
13	Cytologic picture of endometrial hyperplasia	160
14	Cytologic picture of endometrial adenocarcinoma	161
15	Cytologic picture of endometrial adenosquumous carcinoma	161

ABBREVIATIONS

D & C : Dilatation and curettage
DNA : De oxy ribonucleic acid
E₀R : Estradiol-receptor

E₂DH : Estradiol 17-B-dehydrogenase ERT : Estrogen-Replacement Therapy

FIGO : International Federation of Gynecologists and Obstetricians.

FSH : Follicle stimulating hormone

IUD : Intrauterine device
Pap : Papanicolaou
RNA : Ribonucleic acid

TVS : Transvaginal sonography
WHO : World Health Organization

INTRODUCTION

INTRODUCTION

The cervical papanicolaou smear has proven highly successful in detection of cervical neoplasias at an asymptomatic stage. However, it has been unsuccessful in the detection of endometrial carcinoma, as has endocervical aspiration, (Kianoosh, 1978).

The search for simple outpatient methods for direct sampling of the endometrium has led to several instruments being introduced, but none has been widely accepted. Curettage is still the standard procedure for endometrial morphological examination. Critical analysis of this very frequently performed operation has pointed to the relatively low rate of obtaining adequate material in postmenopausal women, the high cost, and last but not least, the inconvenience to the patient, (Ole and Elsa, 1985).

Endometrial cytologic sampling has lagged behind cervical cytologic sampling in its application and, most important, its impact on clinical practice. It is well known that the decline in the incidence of invasive cervical carcinoma has been primarily attributed to the widespread application of a cervical cytology screening program.

A similar phenomenon has not occurred for endometrial carcinoma. Reasons for this are primarily because of the lack of an effective, inexpensive, and easy-to-use sampling method, (La Polla, 1990).

Cytology sampling is a simple office procedure with minimal discomfort to the patient. No anesthesia is necessary, and the cost is low in both money and time consumed.

The Endopap endometrial ctyologic sampler was developed as a simple device aiming at improving the detection of endometrial cancer and its precursors through routine screening.

AIM OF THE WORK

AIM OF THE WORK

Occult endometrial carcinoma is a detectable disease using commercially available sampling devices and cytohistologic techniques.

The purpose of the present study is the assessment of detection of uterine cancer and its precursors using the Endopap endometrial cytologic sampler.

Also, the study will correlate endometrial cytologic specimens with histologic specimens obtained at curettage or hysterectomy.

The study will report the evaluation of the Endopap device as a sampling device and will compare cytologic accuracy versus histopathology in women with symptoms undergoing uterine curettage or hysterectomy.

REVIEW OF LITERATURE