

AIN SHAMS UNIVERSITY
FACULTY OF MEDICINE
DEPARTMENT OF PATHOLOGY

**The Detailed Pathology of Hysterectomy Specimens
(Ovaries, Endometria, Myometria and Cervices)
In Cases of Dysfunctional Uterine Bleeding**

THE S I S
SUBMITTED IN PARTIAL FULFILMENT
FOR THE
MASTER DEGREE IN PATHOLOGY

6/8.54
2-A



M.Sc
15414

By
Zeinab Abdel Kader ShehabEl Din
M. B., B. Ch.

✓



1982

S U P E R V I S O R S

Prof. Dr. Mourad A. Sherif
Prof. and Head of Department of Pathology
Faculty of Medicine
Ain Shams University

Prof. Dr. Mohammad B. Sammour
Prof. of Obstetrics and Gynaecology
Faculty of Medicine
Ain Shams University

Dr. Mahmoud El Shourbagy
Lecturer of Obstetrics and Gynaecology
Faculty of Medicine
Ain Shams University

Dr. Bothina Said
Lecturer of Pathology
Faculty of Medicine
Ain Shams University

Dr. Leila Abdel Monem
Lecturer of Pathology
Faculty of Medicine
Ain Shams University



A C K N O W L E D G E M E N T

I wish to express my deep gratitude to Professor Dr. Mourad A. Sherif, head of the pathology department, Faculty of Medicine, Ain Shams University, for his valuable advice and guidance. I am greatly thankful for his sincere encouragement and the time he devoted for this work.

To my Professor Dr. M.B. Sammour, Professor of Gynaecology and Obstetrics, Ain Shams University, I am deeply indebted for his continuous keen supervision, great help and interest in this work.

I am also greatly indebted to Dr. Laila Abdel Monem, Lecturer of Pathology, Faculty of Medicine, Ain Shams University, for her kind assistance which was essential for my work to be finally achieved.

I wish, heartily to acknowledge my thanks and gratitude to Dr. Bouthina Said, Lecturer of Pathology Faculty of Medicine, Ain Shams University for her sincere help.

I am especially grateful to Dr. Mahmoud El Shourbagy, Lecturer of Gynaecology and obstetrics Ain Shams University for his fruitful suggestions and valuable scientific inspiration.

My deepest appreciation and grateful thanks are due to Dr. Nabil El Tomi, Lecturer of Gynaecology and Obstetrics, Faculty of Medicine, Ain Shams University. It was through his honest valuable guidance and patient supervision, that this work was matured and completed.

C O N T E N T S

	<u>Page</u>
INTRODUCTION	1
AIM OF THE WORK	5
REVIEW OF THE LITERATURE	
- Anatomy of the Female Genital Tract.....	6
- Histology of the Endometrium	13
- Histology of the Ovary	27
- Physiology of the Normal Menstrual Cycle.....	35
- Incidence of Dysfunctional Uterine Bleeding..	55
- Etiology of " " " ..	58
- Classification " " " ..	59
- Clinical Types of Abnormal Bleeding	70
- Endometrial Pathology	74
- Ovarian Pathology	101
- Cervical Pathology	115
 MATERIAL AND METHODS	 116
R E S U L T S	120
DISCUSSION	147
CONCLUSION	161
SUMMARY	163
REFERENCES	166
ARABIC SUMMARY .	

- - -

INTRODUCTION

I N T R O D U C T I O N

Uterine bleeding is the most common symptom and sign of gynaecologic diseases of either organic or functional origin.

Dysfunctional uterine bleeding (D.U.B.) is a symptom both distressing to the patient and perplexing to the gynaecologist who frequently apply this term to classify abnormalities in menstrual bleeding in absence of clinically diagnosed organic lesions.

A decided lack of unanimity, however, exists among clinicians as to precise the meaning of the term and, an uncertainty as to its pathophysiology. A review of several standard gynaecologic texts attests to the lack of agreement of a definition for D.U.B.

Graves (1930) defined D.U.B. as excessive menstrual loss (menorrhagia) or intermenstrual bleeding (metrorrhagia) caused by impairment of endocrine factors that normally control menstrual function.

Sutherland (1949) stated that regardless of the patients age functional haemorrhage should not be

diagnosed until after curettage and histologic examination of the endometrium to exclude organic causes.

According to Holmström (1957) the diagnosis of functional uterine bleeding should be made only after procedures have been performed, that are necessary to rule out other causes of abnormal bleeding, such as carcinoma, myoma, endometrial, complications of pregnancy and blood dyscrasias.

Parsons and Sommers (1962), refer to the entity of functional uterine bleeding and point to the lack of responsiveness of the endometrium to normal hormonal influences or the inability of the ovary to respond to normal pituitary stimulation.

Kistner (1964) alludes to the high frequency with which the diagnosis of D.U.B, has been made at the Free Hospital for Women. He applies the term to abnormal bleeding in which organic lesions can not be recognized by ordinary means. His classification encompasses a wide variety of manifestations which include midcycle staining, excessive flow, constant or intermittent uterine bleeding, irregular endometrial shedding and shortened intervals between flow.

According to Greenblatt and Faucher (1965) functional uterine haemorrhage has been defined as abnormal and excessive bleeding resulting from physiologic, not pathologic disorders, Hormonal dysfunction is the principal cause, but nutritional nervous and psychogenic factors play an important role.

Behrman and Gosling (1966) exclude abnormal bleeding associated with pregnancy, organic pelvic disease, or with systemic conditions such as blood dyscrasias hypertension or exogenous hormones these exclusion leave an entity characterized by little evident organic disease, but nonetheless associated with an endocrine disorder.

To conform with the criteria laid down by Taylor (1965). The term D.U.B. must be applied only when all possible causes for irregular, excessive or prolonged bleeding have been excluded such an exclusive approach would tend to eliminate from consideration any uterine bleeding for which an etiology has been uncovered.

Israel (1967), stresses the exclusion of bleeding associated with pregnancy and neoplastic or inflammatory conditions of the uterus. He also pointed out that the same endocrine dysfunction may produce infrequent menstruation or excessive bleeding at different times.

Vorys & Neri (1968), avoid limiting D.U.B. to anovulatory states, but include corpus luteum inadequacy, shortened cycles, and mid cycle staining.

Scommegna and Dmowski (1973) stated that D.U.B. is an all inclusive term, its diagnosis usually depends on the exclusion of local or systemic organic causes. The term D.U.B. refers to alterations in the physiologic mechanisms controlling a multitude of cyclic events in the woman's reproductive function.

Two areas of general agreement can be concluded from these authoritative sources: First the necessity to exclude bleeding arising from organic disorders of the reproductive tract in order that an entity may qualify as D.U.B. and second the presupposition that endocrinologic abnormalities have a significant relationship to D.U.B.

Aim of the Work

AIM OF THE WORK

As it is clear from definition, dysfunctional uterine bleeding is not a single disease entity, but rather a whole group or category of disorders whose chief feature is abnormal uterine bleeding.

Disturbances of menstruation can occur due to various dysfunctions, in the delicate and highly complicated chain of events that are responsible for normal menstruation.

As the term D.U.B. is commonly used by gynaecologists possibly after exclusion of apparent lesions. One of the aims of this study is to correlate between the clinical impression and a possible pathologic finding by studying hysterectomy specimens of cases diagnosed clinically as D.U.B.

Another aim is to perform a detailed pathological examination of the ovaries, tubes, endometria, myometria and cervixes. This study will try also to correlate between pathological lesions in the ovaries and their effect on the endometrium and myometrium.

Review of the Literature

★
ANATOMY OF THE FEMALE
GENITAL SYSTEM.

I. The OVARY

It is the germinal and endocrine gland of the female.

A. Relations:

The two ovaries are symmetrical, each lying in the peritoneal cavity against the side wall of the pelvis in the ovarian fossa, behind the broad ligament, with the external iliac vessels above, the ureter posteroinferiorly, and covered by the fimbria of the uterine tube medially.

B. Surface and Borders:

Each ovary has got a lateral and medial surfaces, upper (tubal) extremity, lower uterine extremity, anterior (mesovarian) border, posterior (free) border.

C. Attachements:

Suspensory ligament, a peritoneal fold running

★ Pansky and House (1975)