# ROLE OF THE GYNAECOLOGIST IN EVALUATION OF BREAST LUMPS

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF MASTER DEGREE IN OBSTETRICS AND GYNAECOLOGY

BU

### Hesham Mahmoud Mohamed

M.B.B. Ch., Ain Shams University (1991) Resident (registrar) of Obstetrics & Gynæcology 68524 Ain Shams Maternity Hospital

Supervisors

## Prof. Dr. AHMED GALAL ELLISI M.D.

Professor of Gynæcology and Obstetrics Faculty of Medicine Ain Shams University

## Dr. SHERIF A. AKL

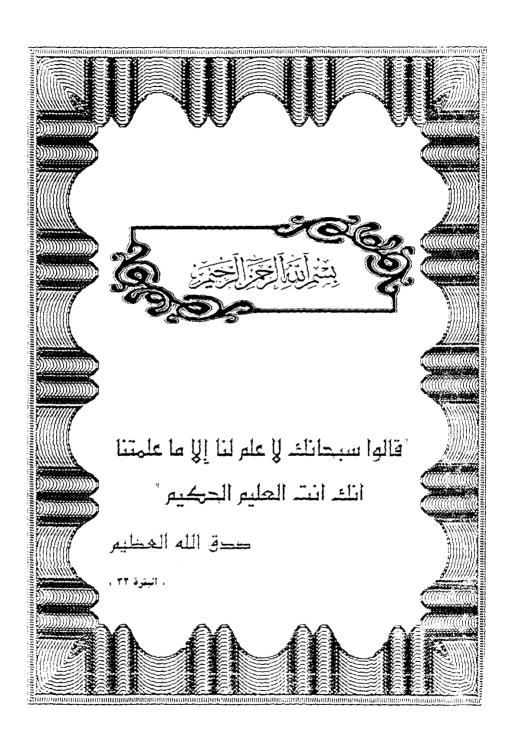
Assistant Professor of Gynæcology and Obstetrics **Faculty of Medicine** Ain Shams University

## Dr. RAGAA AMIN FAWZY

Assistant Professor of Pathology **Faculty of Medicine** Ain Shams University

> Faculty of Medicine Ain Shams University 1996







#### Acknowledgment

I wish to express my deepest gratitude and appreciation to Professor Dr. Ahmed Galal El Lissi, Supervisor of the Breast Clinic, Professor of Obstetrics and Gynaecology, Faculty of Medicine, Ain Shams University, to whom Iam greatly indebted and much grateful for his patience, cooperation, supervision, valuable suggestion with his advice, which allowed me to go through lots of difficulties during this work.

I wish also to express my gratitude and appreciation to Dr. Sherif A. Akl, Assistant Professor of Obstetrics and Gynaecology, Faculty of Medicine, Ain Shams University for his support and generous ideas.

Iam also grateful to Dr. Ragaa Amin Fawzi,
Assistant Professor of Pathology-unit of early cancer
detection, Faculty of Medicine, Ain Shams University for
her continuous assistance in the practical part of this thesis
by doing F.N.A. interpretting it, histopathological diagnosis
of Benign lesions, guidance in writing the review of
literature.

Hesham Mahmoud Mohammed



## LIST OF FIGURES

Title	Facing
	Page
1-The milk line.	8
2-Vertical section of the female breast	8
3-Anatomy of the breast.	10
4-Anatomy of the duct system of the breast.	10
5-Histological structure of the breast.	10
6-Microstructure of the breast.	10
7-Arteriograph of the mamma.	12
8-Arterial blood supply to the breast.	12
9-Subareolar lymphatic plexus.	14
10-Lymphataic drainage of the female breast.	16
11-Standardized description of axillary nodes.	16
12-Vascular connections to the female breast.	16
13-Prolactin secretion control.	18
14-The best time for breast examination and	
hormone assay.	18
15-Multiplicity of hormonal factors on the breast.	20
16-Dyshormonal dystrophies.	36
17-Mammotomograph and mammotomnography	
cassette.	76
18-Mammographic semiology: benign lesions.	80
19-Mammographic semiology: malignant nodules	80
20-Mammographic semiology: suspicious signs.	80
21-Benign calcifications.	80
22-Xeromammography.	82
23-Radioanatomy of the mammary fibroglandular	
matrix.	82
24-Results of cytological examination in different	
breast disease.	94
25-Physical examination of the breast.	132
26-Physical examination of the breast (cont.).	132
27-Fine needle aspiration of a breast mass.	134



Title	Page
I-Represents relation between number of cases with	144
duffuse enlargement with number of cases with	
loclized enlargement.	
II-Represents relation between number of cases with	145
regular breast feeding with number of cases with	
infrequent or no breast feeding.	
III-Represents relation between number of smoker	146
cases with number of non smokers.	
IV-Represents various types of contraceptives used	147
by the study group.	
V-Represents various menstrual abnormalities	148
encountered in the study group.	
VI-Represents the percentage of association of	149
multiple fibroid uterus to normal uterus.	
a- Mastitis.	150
b-Ductal hyperplasia.	150
c-Cystic lesion.	151
d-Fibrocystic mastopathy.	151
e-Fibroadenoma.	152
f-Malignnt breast lesion.	152



## LIST OF TABLE

Title	Page
1-Demonstrates classification of ANDI	26
2-Nomenclatures and the underlying physiological	37
or pathological association of benign breast disease.	
3-ANDI concept.	44
4-Evaluation of breast masses in postmenopausal	52
women.	
5Evaluation of breast masses in premenopausal	53
women.	55
6-Staging for breast cancer.	
7-Histologic types of breast cancer	58
8-Shows descriptive statistics of the study group	140
9-Demonstrates mammographic findings in the study	140
group.	
10-Demonstrates breast ultrasonography findings in	141
the study group	
11-Demonstrates the fine needle aspiration cytology	141
in the study group.	
12-Demonstrates the relation of cellular diagnosis to	142
clinical presentation as regards size of the lump.	
13-Demonstrates correlation of prominent	142
mammographic findings to cellular diagnosis.	
14-Demonstrates correlation of prominent breast	143
ultrasonographic findings to cellular diagnosis.	
15-Demonstrates the comparison between cytology	143
and histopathological diagnosis.	

## **CONTENTS**

Introduction	1
Aim of the Work	5
Review of Literature	7
Anatomy of the human female breast.	7
Physiological consideration	18
Benign breast diseases	26
Malignant breast diseases	46
Risk factors of breast neoplasia	62
Symptomatology of breast cases	71
Investigations of the breast	<i>75</i>
Screening program for the breast	107
The role of gynaecologist in management	
of breast lumps	126
Subjects and Methods	131
Results	153
Summary and Conclusion	167
Abstract	171
References	173
Arabic summary	

