

12061/2

*Recent Trends
in
Breast Cancer*

An Essay

*Submitted for partial fulfilment of
The Master Degree of General Surgery*

By

*Saad Moussa Moussa Aly
M.B.B.ch.*

618-19
S.H

Supervisor

Prof. - Mohamed Sameh Zaki

Prof. of General Surgery

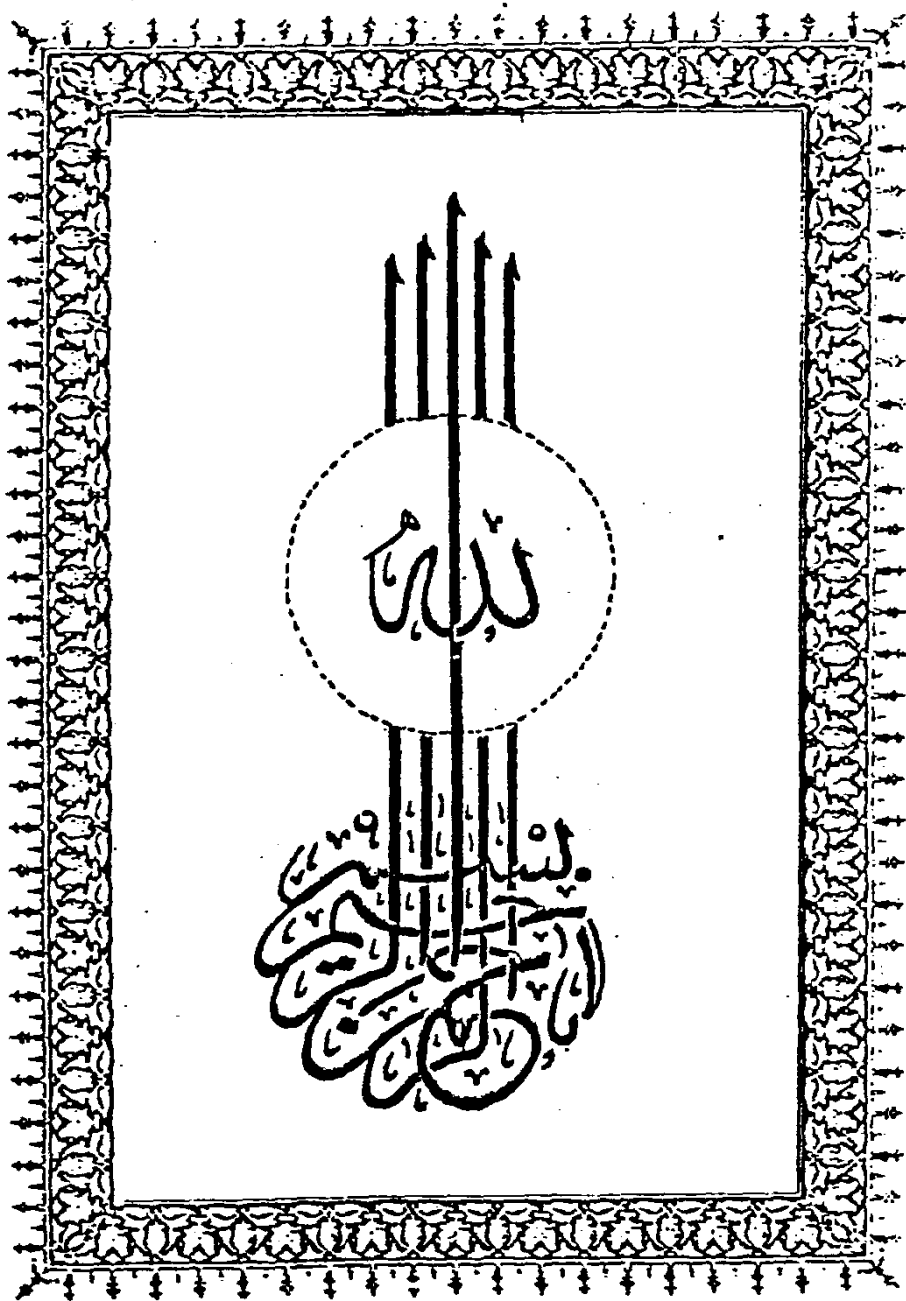
Faculty of Medicine

Ain Shams University

1987

29/80







بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

الْرحمن

عَلَّمَ الْقُرْآنَ خَلَقَ الْإِنْسَانَ

عَلَّمَهُ الْبَيَانَ :

(صَدَقَ اللَّهُ الْعَظِيمُ)

2

ACKNOWLEDGEMENT

I would like to express my deepest gratitude to Prof. MOHAMED SAMEH ZAKI Prof. of General Surgery, Faculty of Medicine, Ain Shams University for his great help, Kind supervision, and valuable direction.

I would like also express my thanks to Dr. MOHAMMED ABD EL MONIUM, Lecturer of General Surgery, Ain Shams University, for his continuous encouragement, reviewing the work.

I wish to thank every one helped me to complete this work.

TO MY DAUGHTER

ASMAE

INDEX

	<u>Page</u>
Introduction	1
Surgical anatomy of Female breast	3
Etiology of Breast Cancer	13
Pathology	20
Spread of Breast Cancer	39
Clinical Staging	48
The endocrinal Control of Breast Cancer	56
Breast Cancer genetics	59
Prognostic Factors of Breast Cancer	62
Incidence of Breast Cancer	69
Breast Self examination	73
Periodic Medical examination	77
Mammography	87
Xerography	95
Computed Tomography mammography	97
Thermography	99
Ultrasonography	103
Breast Biopsy	108
Frozen Section examination	121
Local Therapy	125
Radiotherapy	148
Chemotherapy	160
Hormonal Therapy	171
Immunotherapy	185
Categorization and line of Treatment of breast Cancer	186
Hospital Stay and Complications for breast Cancer..	195
Breast Cancer in Pregnancy or Lactation	198
Male breast Cancer	200
Summary	202
Referrences	204
Arabic Summary	

INTRODUCTION

INTRODUCTION

Breast cancer is the most common female malignancy of mid life and is the leading cause of death among women in the united-states between the age of 15 to 74 years.

Breast cancer accounts for 25% of all malignancies seen in the Gustave-Roussy Cancer Institute in France and 31.3% of all cancers among Egyptian women in the Cairo metropolitan area (Omar 1984).

The cause of breast cancer is still unknown and no method of prevention is available till now but number of predisposing factors had been determined.

During the past two decades, the aim of research in early breast cancer treatment, has not only been to increase long-term survival, but also to improve the quality of survival by obtaining better esthetic results and lower morbidity, such goals could be achieved by reducing surgery and/or radiotherapy.

In recent years the knowledge of breast cancer has progressed rapidly, resulting in new approaches and techniques in early detection and diagnosis, improved treatment methods, prognosis and rehabilitation. These improved treatment modalities include advances in surgery, radiotherapy, chemotherapy; immunotherapy and hormone therapy.

The first and most important method for diagnosis of breast cancer is the clinical examination, either by the female as self examination or by the physician at regular intervals which is called periodic medical examination which has absolute importance in the early detection and prognosis of the disease. The definitive diagnosis is made by the pathologist.

This work will study the pathology, diagnosis and treatment of breast cancer.

ANATOMY OF THE BREAST

SURGICAL ANATOMY OF FEMALE BREAST

Topographic Anatomy

Usually, the breast is divided into 4 quadrants (upper outer-upper inner, Lower outer, and Lower inner); Taking the nipple as the centre as well as a retro areolar area and an axillary Tail. During the initial clinical diagnosis it is important to make this topography precise as it is valuable regarding nodal management and irradiation fields.

Extent of Female breast:

Vertical: 2nd to 6th ribs inclusive.

Horizontal: The side of the sternum to the midaxillary line. about two thirds of the breast rests upon pectoralis major, one-Third on the serratus anterior. At its lower medial quadrant the gland rests on the aponeurosis of the external oblique which separates it from the rectus abdominis.

Axillary Tail of Spence

This is a prolongation from the outer part of the gland.

The axillary tail passes up to the level of the 3rd rib in the axilla where it comes in direct contact with the main lymph nodes of the breast (anterior axillary nodes). This process of breast tissue gets into axilla through an opening in the axillary fascia, known as the foramen of Langer.