

# **MANAGEMENT OF BENIGN BREAST TUMORS**

**Essay**

**Submitted for partial fulfillment for Master Degree in  
General Surgery**

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*Mohamed Esmail*

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿ قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا

إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ ﴾

صدق الله العظيم  
الآية (32) سورة البقرة

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## List of Abbreviations

<i>Abb.</i>	<i>Meaning</i>
3D	Three dimensional
BIRADS	Breast Imaging Reporting and Data System
BSE	Breast self-examination
CNB	Core needle biopsy
DCIS	Ductal carcinoma in situ
FDG	Fluorine 18 labeled deoxyglucose
FNA	Fine-needle aspiration
GCT	Granular cell tumor
LCIS	lobular carcinoma in situ
MRI	Magnetic resonance imaging
PEM	Positron emission mammography
PET	Positron emission tomography
SAN	Syringomatous Adenoma of the Nipple
TDLUs	Terminal ductal lobular units
TNM	Tumour–Node–Metastasis
TTS	Triple Test Score
VACB	Vacuum-assisted core biopsy





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# Introduction

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## **Introduction**

Benign breast diseases includes all nonmalignant conditions of the breast and typically do not convey an increased risk of malignancy. Patients with benign breast conditions are often first seen by their primary care physician or their gynecologist. Benign breast diseases are often misdiagnosed and misunderstood because of their variety in presentation and anxiety about the possibility of malignancy (*Amanda et al., 2013*).

In recent years, breast care has become an established specialty throughout our health care system as evidenced by the existence of breast surgical fellowships and dedicated breast care centers. The care of women who have concerns about their breast health or breast abnormalities is a complex process that is best addressed by an interdisciplinary, collaborative model of care (*Amanda et al., 2013*).

The incidence of benign breast lesions rises during the second decade of life and peaks in the fourth and fifth decades, as opposed to malignant diseases, for which the incidence continues to increase after menopause. With the advent of hormone replacement therapy (HRT), an increasing number of postmenopausal women now present with a similar spectrum of disorders (*Fisher et al., 2005*).

Benign breast diseases are not a precursor lesion to breast cancer in the same way that a polyp is a precursor to colon cancer. A polyp is a dysplastic lesion that if left in situ has a high likelihood of acquiring additional mutations that will cause it to progress to colorectal cancer. Benign breast diseases are instead a marker of a proliferative state of the breast that is a “herald” or “early warning sign” that a cancerous process may initiate elsewhere within the breast. Although many studies have shown that a higher proportion of breast cancers will subsequently develop in the same breast in which the benign breast diseases

were diagnosed, the diagnosis of atypical benign breast diseases also confer an increased risk of cancer in the contralateral breast (*Frazier and Rosenberg ., 2013* ).

Breast benign diseases have a much higher incidence than breast cancer. Generally, women with benign breast disease might not have an increased risk of developing breast cancer. Therefore, the conservative management such as periodic examinations for these lesions is widely accepted among clinical practitioners. However, many patients may prefer complete excisions for these lesions, partially because of the psychological stress concerning the potential malignant transformation. The rapid progress of the minimal invasive diagnostic tools is another reason. Vacuum-assisted biopsy has become a major tool for evaluating breast lesions. With the advent of large-bore cannulae, the VAB device greatly prompted the complete excision of breast lesions in our daily practices (*Shunrong., 2013*).

With the use of mammography, ultrasound and magnetic resonance imaging of the breast and the extensive use of needle biopsies, the diagnosis of benign breast diseases can be accomplished without surgery in the majority of patients. Because the majority of benign lesions are not associated with an increased risk for subsequent breast cancer, unnecessary surgical procedures should be avoided. It is important for pathologists, radiologists and oncologists to recognize benign lesions both to distinguish them from in situ and invasive breast cancer and to assess a patient's risk of developing breast cancer, so that the most appropriate treatment modality for each case can be established (*Guray and Sahin, 2006*).



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# **Aim of the Work**

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## **Aim of the work**

This study is provided to highlight what is new in benign tumors of the breast as regarding; their proper management depending on the proper clinical diagnosis and using the proper investigations, and how to differentiate between the benign and malignant breast tumors.



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# **Review of Literature**

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# ***Anatomy of the Breast***

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