



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



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جامعة عين شمس

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Oncoplastic Techniques for Early Upper Inner Quadrant Breast Cancer; a Comparative study between Inferior Pedicle Mammoplasty and Doughnut Mastopexy

Thesis

*Submitted for partial fulfilment of the M.D. degree In
General Surgery*

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2020

Acknowledgment

*First and foremost, I feel always indebted to **GOD**, the
Most Kind and Most Merciful.*

*I'd like to express my respectful thanks and profound
gratitude to **Prof. Dr. Osama Ali El Atrash**, Professor
of General Surgery Faculty of Medicine – Ain Shams for his
keen guidance, kind supervision, valuable advice and
continuous encouragement, which made possible the
completion of this work.*

*I am also delighted to express my deepest gratitude and
thanks to **Prof. Dr. Ahmad Gamal El Din Osman**,
Assistant Professor of General Surgery Faculty of Medicine –
Ain Shams, for his kind care, continuous supervision, valuable
instructions, constant help and great assistance throughout
this work.*

*I am deeply thankful to **Prof. Dr. Sherif
Mohammed Mohsen Ismail**, Assistant Professor of
General Surgery Faculty of Medicine – Ain Shams University,
for his great help, active participation and guidance.*

Bishoy Refaat Ragheb Ayoub

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List of Abbreviations

Abb.	Full term
AJC	American Joint Committee on Cancer
BCS.....	Breast-conserving surgery
BCT.....	Breast conserving treatment
biALCL	Breast implant-associated anaplastic large cell lymphoma
CB	Core biopsy
DCIS	Ductal carcinoma in situ
DIN	Ductal intraepithelial neoplasia
FNA	Fine needle aspiration
HR.....	Hormone receptor
HRT	Hormone replacement therapy
IBC.....	Inflammatory breast cancer
IDC	Invasive ductal carcinoma
ILC.....	Invasive lobular carcinoma
IMF.....	Inframammary fold
LCIS	Lobular carcinoma in situ
LIN	Lobular intraepithelial neoplasia
MDT	Multidisciplinary team
MRI.....	Magnetic resonance imaging
NAC.....	Nipple and areola complex
NST.....	No special type
OBCS.....	Oncoplastic breast conserving surgery
OPS.....	Oncoplastic surgery
PBL.....	Primary breast lymphoma
PMRT.....	Postmastectomy radiation therapy
TNM	Tumor node metastasis
WHO	World Health Organisation

INTRODUCTION

The breast is the true mirror of femininity, and it remains in the mind of every one of us as the heart of womanhood, with its role as nourisher, and comforter. These roles evoke the idea of the importance and the affection of this delicate organ has in the minds of women (*Urban, 2013*).

Breast cancer is predicted to be the most common newly diagnosed cancer in women and accounts for 29% of all cancers in women (*Bohon, 2017*).

In Egypt, the rate of breast cancer is higher than the worldwide records representing 32.04% of female diagnosed cancers. More importantly; it has been reported that 49.7% of the Egyptian patients have regional spread at the time of diagnosis and 11.9% of them have distant metastasis (*Ahmed, 2016*).

When a woman is diagnosed with breast cancer many aspects of her physical, emotional and sexual wholeness are threatened and she experiences a life-threatening issue by facing the mortality of the disease as well (*Holmes et al., 2011*).

Cases of breast cancer have been recorded in medical writings for more than 5000 years. In documents from the ancient world, they appear with perhaps greater frequency than any other form of cancer. This suggests that the frequency of breast cancer was significant. The first written evidence suggestive of breast cancer is from ancient Egypt and is found

in the Edwin Smith and Ebers Papyrus, dating back from 3000 to 2500 BC (*Yan, 2013*).

Radical mastectomy, a procedure conceived and popularized by William S. Halsted as the surgical treatment for breast cancer. It removes the entire breast, the underlying pectoral muscles and the axillary lymph nodes, leaving behind a depression under the clavicle, prominent ribs and a markedly deformed patient and it was referred to as “The operation women fear most”. Later, the modified radical mastectomy became popular; not because there was a prospective randomized trial proving its equality, but rather because the Women’s Movement, frustrated with years of mutilation, had pressed for the change (*Silverstein, 2016*).

The approval of breast conserving surgery by the World Health Organization Committee of Investigations for Evaluation of Methods of Diagnosis and Treatment of Breast Cancer since 1996 has offered an alternative treatment method for early breast cancer besides radical mastectomy (*Lin et al., 2016*).

Breast conserving surgery, defined as "complete removal of the breast issue with a concentric margin of surrounding healthy issue performed in a cosmetically acceptable manner (lumpectomy) usually followed by radiation therapy", became the standard therapy for low grade breast cancer. It is safe and preferred in all early detected breast cancers as it provides the same level of overall survival as mastectomy. This is found by

several prospective and randomized studies and number of clinical trials. Besides that, it offers higher quality of life by reducing the impact of psychosocial adjustment, body image and sexual function caused by mastectomy (*Fajdic et al., 2013*).

It is expected that around 30% of all breast conserving surgeries bring late aesthetic results that are considered unsatisfactory. The choice for preventive measures that have integrated techniques of plastic surgery into breast cancer surgery is changing this reality. Therefore, oncoplastic surgery is considered as tumor specific immediate breast reconstruction in order to optimize surgical planning (*Urban et al., 2011*).

Audretsch, by the early 90's, suggested the integration of plastic surgery techniques with breast-conserving treatment for breast cancer. Conceptually, this approach was referred as "oncoplastic surgery", which aims at providing safe oncologic treatment through careful pre-operative planning and the incorporation of plastic surgery techniques in order to obtain good oncologic control with favorable cosmetic results in cases of large breast volume (*Zucca-Matthes et al., 2013*).

The term "oncoplastic" was first introduced in the literature by Gabka et al. in 1997 to expand the spectrum of the indication for BCS. Oncoplastic surgery involves more than just the combination of oncologic principles with plastic techniques, as surgeons can perform larger excisions with free

margins using various mammoplastic methods of remodeling the remaining breast tissue (*Lin et al., 2016*).

Oncoplastic surgery represents a major advance in breast cancer surgery and has been receiving a widespread acceptance in breast conserving surgery. It is based on three principles: ideal breast cancer surgery with wider excisions, immediate breast reconstruction and immediate symmetry of the other breast, whenever necessary (*Urban et al., 2011*).

Therefore, oncoplastic surgery is considered as the “third pathway” between breast conserving surgery and mastectomy (*Clough et al., 2010*).

Among others, lesions located in the upper inner quadrant of the breast deserve the most attention; a wide excision in this location can have a significant impact on the overall quality of the breast shape by distorting the visible breast line (*Lin et al., 2016*).

Large defects in the upper inner quadrant of the breast will shift the nipple in an unnatural upward or medial fashion. That’s why oncoplastic surgery is of special importance in managing breast cancer located at the upper inner quadrant, the area known as the no man’s land (*Zaha, 2015*).

If the tumor is in the upper inner quadrant of the breast and there is concern about creating unfavorable results from a cosmetic standpoint with lumpectomy alone, then inferior