

Reduction mammoplasty, oncoplastic tool for treatment of early stage breast cancer

Essay

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surgery**

Submitted by

Dr. Rania Mustafa Abdul Fattah

M.B.B.CH

Under supervision of

Prof. Dr. Sayed Ahmed Marei

Prof. of General Surgery

Faculty of Medicine Cairo University

Prof. Dr. Sameh El Noamany

Assistant Prof. of Plastic Surgery

Faculty of Medicine Cairo University

Dr. Omar Sherif Omar

Lecturer of General Surgery

Faculty of Medicine Cairo University

Faculty of Medicine Cairo University

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Abstract

Breast cancer is the most common cause of cancer death among women worldwide. Incidence rates are high in more developed countries.

It is generally accepted that mammography screening will lead to a breast cancer related mortality reduction of about 15% (10–30%) in the screened population.

The evaluation and management of symptomatic breast cancer can be as varied as the disease itself. However, several principles remain essential so as to ensure accurate diagnosis, staging and treatment. The surgical management of breast cancer has evolved considerably from the time of Halstead with the introduction of the radical mastectomy (surgical removal of the breast, pectoralis major and minor muscles with a full axillary lymph node dissection).

Since the early 20th century, great efforts have been made to obtain not only loco-regional control and long-term survival, but also breast` preservation, In the setting of breast-conserving surgery, oncoplastic surgery means that after appropriate excision of the cancer, the remaining breast tissue is reshaped to achieve the best possible esthetic result.

reduction techniques are among of these techniques used in treatment of early stage breast cancer.

Key words: radical mastectomy--- loco-regional---oncoplastic surgery.

***To my
family***

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Introduction

Breast cancer is the most common cause of cancer death among women worldwide. Incidence rates are high in more developed countries, a study of migrants from the Middle East to Australia did indicate that the Egyptian women had the highest breast cancer rates of Middle Eastern immigrants(*Sherif Omar, et al 2010*).

Paradoxically mortality rates are decreasing due to earlier diagnosis ,adjuvant hormonal, chemotherapy, radiotherapy and better surgical techniques(*Sherif Omar, et al 2010*).

Many women express fear of breast surgery based on previous experience of an affected close relative with radical mastectomy & its functional and aesthetic outcome (*de Haes et al,1986*).

The quality of life for patients with cancer is routinely overseen by most physicians as they are trained to primarily treat the patients illness without taking care of psychological issues(*Bajaj et al,2004*).

Surgery is the main line of treatment of breast cancer because surgery aims to achieve loco regional control of the disease, pathological evaluation of resected tissue which informs decisions regarding adjuvant local and systemic therapy(*Spear et al,2003*).

So women are conventionally polarized into one of two main categories:

- Candidates for breast conservation surgery
- Candidates for mastectomies

Breast conservation therapy (BCT), comprising wide local excision and adjuvant radiotherapy, remains the standard of care for early stage breast cancer(*Bajaj et al,2004*).

More recently, oncological safety and aesthetic outcome have become common goals, no longer seen as mutually exclusive with the development of oncoplastic surgery, the use of oncoplastic techniques in treatment of breast cancer is one of the typical “quality of life improvers” (*Kon et al,2004*).

The term of oncoplastic surgery:

Was coined to describe an evolving area of breast surgery that applies the principles of surgical oncology , plastic and reconstructive surgery to the management of women with breast cancer(*Anderson ,et,al,2005*).

As for the choice of mammoplasty technique, like other oncoplastic procedures, the choice of the procedure is an individual process resulting in the interrelationship of certain factors such as tumor location and possibly the most decisive factor is the surgeon skill and preference and wishes of the patient (*Spear et al, 2003*).



Aim of the Work

This review gives a summary of the most recent techniques developed for immediate reconstruction in early stages of breast cancer by using breast reduction techniques & highlights the different methods of reduction mammoplasty which are used as tool for oncoplastic surgery as regards

- Technique & Flap used
- Need for symmetry
- Oncological follow up



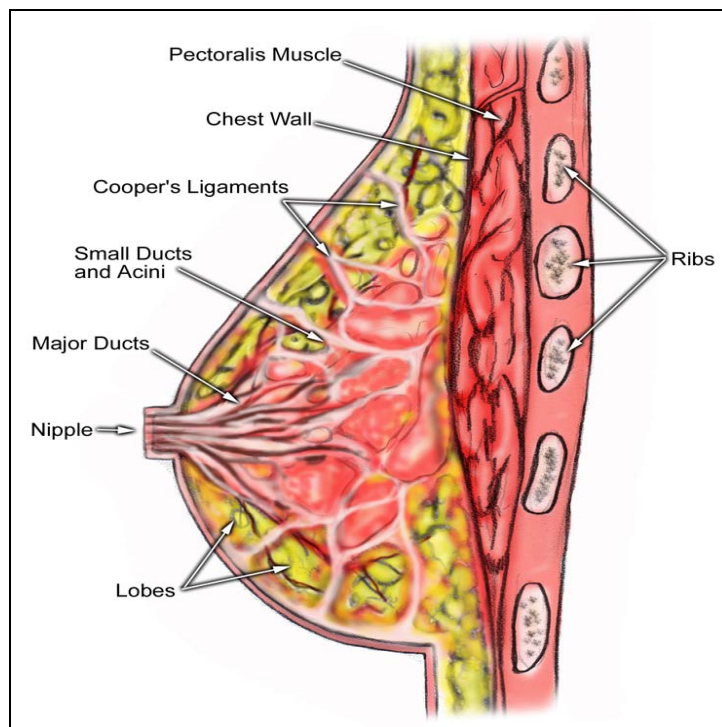
Review of Literature



Chapter (1)

Applied anatomy of the female breast

As with all surgical procedures, understanding the anatomy is crucial prior to performing an operative procedure. Comprehension of breast anatomy enhances the surgeon's ability to perform surgery safely and effectively (*Berthe et al, 2003*).



(figure 1.1: structure of the breast Botwick et al, 1983)

❖ **Anatomical considerations in female cancer breast:**

In studying the anatomy of the breast, three important aspects are to be considered, the "descriptive" anatomy, the "vascular" anatomy, topography of the breast (*Botwick et al, 1983*).

Some authors consider that, the descriptive anatomy of this variable sized organ has been well known for decades, so that recent reviews have been unnecessary. However, this does not apply to factors relevant to the vascular and morphologic anatomy discovered in the recent years (*Morehead et al, 1982*).

1-Descriptive anatomy of the female breast (Structure of the breast):

- Mammary gland: a modified apocrine sweat gland which consists of varying proportions of glandular tissue proper, adipose tissue, connective tissue (*Howard et al, 2000*).