Comparative Study between Extended Latissimus Dorsi Flap and Skin Sparing Mastectomy with Subpectoral Silicone Implant

Thesis

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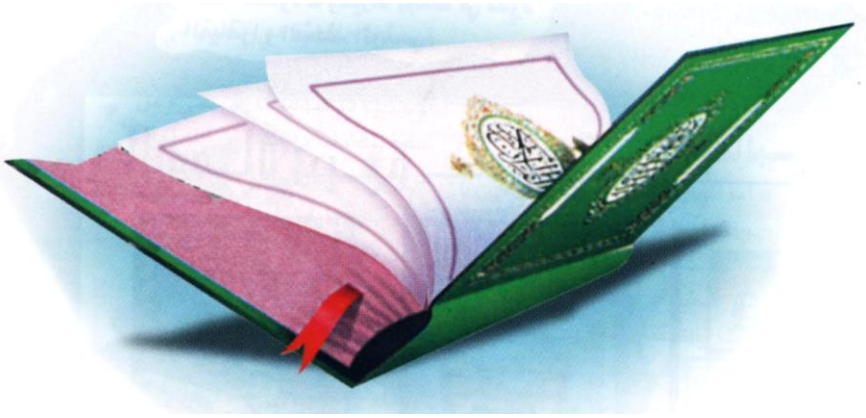
بسم الله الرحمن الرحيم

وَقُلِ اعْمَلُوا فَسَيَرَى اللَّهُ
عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِنُونَ



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List of Abbreviations

Abb.	Full term
BC	*Breast cancer*
ER	*Oestrogen receptor*
FNAC	*Fine needle aspiration cytology*
IDC	*Invasive ductal carcinoma*
IMA	*Internal mammary artery*
LD	*Latissimus Dorsi*
LTA	*Lateral thoracic artery*
MRI	*Magnetic resonance imaging*
NAC	*Nipple-areola complex*
NCI	*National Cancer Institute*
NSM	*Nipple-sparing mastectomy*
NST	*No special type*
pN	*Lymph Node Status*
pT	*Tumour Size*
SSM	*Skin-sparing mastectomy*
TAT	*Thoracoacromial trunk*
TILs	*Tumour-infiltrating lymphocytes*
TRAM	*Transverse rectus abdominis musculocutaneous*
WHO	*World Health Organization*

INTRODUCTION

In Egypt, breast cancer is the most common cancer among women, representing 18.9% of total cancer cases (35.1% in women and 2.2% in men) among the Egypt National Cancer Institute (NCI) series of 10,556 patients during the year 2001, with an age-adjusted rate of 49.6 per 100,000 population ***(Salem and Abbass, 2010).***

Heterogenous diseases as breast cancer, HER2/neuoncoprotien, progesterone receptor and estrogen receptors are prognostic markers which helps to recognize multiple molecular subtypes of breast cancer ***(Carey et al., 2010).***

Breast cancer risk factors: first degree relative diagnosed with breast cancer in young age, late menopause, early menarche, first pregnancy in old age (>30 years old) ***(Andersen et al., 2013).***

Two diagnostic classification of the breast cancer(benign and malignant) is subdivided into: (1) symptomatic breast cancer with symptoms and signs on examination (2) no symptoms or signs only diagnosed by screening mammography ***(Perry et al., 2008).***

Breast conserving therapy is the treatment of early stage breast cancer with segmentectomy, quandrantectomy, a partial mastectomy–lumpectomy successed by adjuvant radio-therapy.

It is estimated that, at minimum, 20-35% of patients treated with a breast conserving approach have unfavorable aesthetic outcomes. While many patients accept these results, a significant portion of these patients are dissatisfied enough to seek corrective surgery ***(Goldhirsch et al., 2013).***

Several types of mastectomy procedures are available to the breast surgeon. Total mastectomy is the most commonly performed mastectomy, with removal of the nipple-areola complex (NAC) and whole breast tissue in addition to the nipple-areola complex skin ellipse. A skin sparing total mastectomy resects all breast tissue through a circumareolar incision including resection of the nipple but preserving the skin envelope, thus facilitating immediate reconstruction. A nipple sparing total mastectomy is a modification of the skin sparing mastectomy that preserves NAC ***(Boneti et al., 2011).***

Skin-sparing mastectomy (SSM) was introduced by ***Toth and Lappert in 1991,*** they described the pre-operative incisional mastectomy planning in an attempt to facilitate reconstruction of the breast and maximum skin restoration. a circumareolar incision is done to remove the breast parenchyma, nipple-areola complex with preservation of breast skin as much as possible, rebuilding a breast by the plastic surgeon with great harmony to the opposite breast in shape, color and size this can be achieved by preservation of native skin envelope and the inflammatory fold ***(Patani and Mokbel, 2008).***

Skin-sparring mastectomy with immediate reconstruction is an great option for total breast parenchyma removal and pleasing breast mass presented by an implant or flap ***(Giacalone et al., 2010).***

Nipple sparring mastectomy involves a total mastectomy through a lateral incision, example: incision lateral to the areola. The advantages of nipple sparring procedures is most evident in implant-based reconstructions as the point of maximal projection of the breast is best preserved ***(Sisco and Yao, 2016).***

In the United States reconstruction by Implants and tissue expanders are most widely used. healthy mastectomy skin flaps to are required for prevention prosthesis expulsion. lower primarily cost in comparison with autologous reconstruction is an a benefit, no further scar or donor site morbidity easier operative technique, , recovery and operative time are shorter compared with autologous tissue reconstruction ***(Mendenhall et al., 2015).***

Reconstruction with autologous tissue provides the patient with a reconstructed breast created with her own tissues. The disadvantage with this technique is identified with the formation of an extra contributor site with scarring and potential morbidity. Although reconstruction with tissue expanders and implants eliminates the need for additional donor site, the potential complications associated with these devices are a concern ***(Cordeiro, 2008).***