INTRODUCTION

The breast represents a secondary sexual characteristic and symbol of feminity and maternity. A radical and modified radical mastectomy is a mutilate surgical intervention which causes a number of emotional and social problems. Reconstructive surgery helps to overcome psychosocial problems of the patient and her return to everyday activities **(Kosovac et al., 2001).**

Annually, about 178,500 women in the United States are diagnosed to have breast carcinoma , of whom about two thirds will elect to undergo breast-conserving therapy and one third will elect to undergo mastectomy **(Cordeiro, 2008).**

Breast reconstruction following mastectomy has become the standard of care in most of the centers worldwide. The National Institute for Clinical Excellence in the United Kingdom estimates that every woman contemplating a mastectomy must be offered the choice of reconstruction **(Mosahebi et al., 2007).**

Goal of breast reconstruction is to address the disfigurement and sense of loss that often follow mastectomy and to create breast symmetry. The decision whether to pursue reconstruction and the choice of reconstructive strategy are individualized and take into account the patient's body characteristics, overall health , breast cancer treatment plan and personal preferences **(Djohan et al., 2008).**

Timing of breast reconstruction after mastectomy is determined primarily by patient factors and the need for post mastectomy radiation therapy. If the risk of post mastectomy radiation is low, then immediate

reconstruction produces the optimal aesthetic result. If the risk of post mastectomy radiation is high, then delayed reconstruction is preferable to optimize both radiation delivery and aesthetic outcome **(Ananthakrishnan and Lucas, 2008).**

Breast reconstruction generally consists of two stages: restoration of the breast mound and reconstruction of the nipple-areola complex. Reconstruction of the breast mound itself can be performed with the use of either implants or autogenous tissues **(Salius et al., 2007).**

In cases of flap reconstruction, skin, fat, and muscle are transferred either as a pedicled flap or as a free flap .The most common pedicled flap is the transverse rectus abdominis myocutaneous (TRAM) flap **(Cordeiro, 2008).**

Implant reconstruction may be single or two stage procedures. Traditionally, small breasts with minimal ptosis are suited for single-stage reconstruction. Large breasts or inadequate skin require tissue expanders followed by implants **(Mohammadi et al., 2006).**

All procedures for breast reconstruction are associated with an increase in morbidity beyond that associated with mastectomy alone. Each procedure has advantages and disadvantages that must be weighed by the patient and her physician to reach an appropriate decision **(Cordeiro, 2008).**

Advantages of breast reconstruction with implants compared with reconstruction with pedicled or free flaps include the simple technique, short operation time, minimal scarring, native skin colour and preservation of some sensitivity **(Henriksen et al., 2005).**

The creation of a nipple-areola complex following breast reconstruction improves the cosmetic outcome, and many patients may request such a

procedure. Most nipple recreation takes place two to six months after the initial breast reconstruction to allow the new breast area ample time to heal **(Jatoi et al., 2006).**

Many studies clear that neither implant-based nor autologous tissue-based reconstruction has any effect on the incidence or detection of cancer recurrence **(McCarthy et al., 2008).**

It is important for women who have had breast reconstruction to continue receiving yearly mammography on the normal breast. Women who have had breast reconstruction should also practice monthly breast self-examination(BSE) and have yearly clinical breast exam, in addition, women who receive silicone-filled breast implants are recommended to have MRI breast screening three years after implantation and every two years thereafter to screen for possible silent rupture **(Justus & Raymund, 2009).**