Breast Reconstruction After Conservative Mastectomy for Breast Cancer

essay

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List of Abbreviations

Ductal carcinoma in situ
Lobular carcinoma in situ
Invasive duct carcinoma
Cranio-caudal
Medio-lateral oblique
Magnetic resonance imaging
Positron emission tomography
Flouro deoxy glucose
Flouro oestradiol
Breast conservative treatment
Breast conservation surgery
Sentinel lymph node
Fine needle aspiration
Sentinel node
Radiotherapy
Whole breast radiation
Accelerated partial breast irradiation
Partial breast irradiation
Electron intra operative therapy
Latissimus dorsi
Nipple areola complex
Intercostal artery perforator
Thoracodorsal artery perforator
Transverse rectus abdominis myocutaneous
Deep inferior epigastric artery perforator
Lateral transverse thigh flap

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Introduction

Nowadays breast cancer accounts for the highest prevalence of malignant diseases in the female population of industrialized countries, accounting for just over 1 million new cases annually. (1),(2)

Breast cancer is a threatening disease and a socioculturally formed stigma. Women who develop tumors in their breast tissue feel emotionally alien to themselves. ⁽³⁾

Immediate and secondary breast reconstruction helps patients to reconfigure the integrity of the body-self. (3)

History of surgical treatment of breast cancer goes back at least 2000 years. During this time surgeons have moved back and forth between alternatives of local excision of the tumor and more extensive operations such as total mastectomy or radical mastectomy. (4)

Radical mastectomy was described by Halsted in 1894 in which we remove the whole breast, the pectoral muscles (major and minor) and the axillary lymph nodes. The pre Halsted era saw attitudes ranging from willful abstention to brutal treatments by cauterization or amputation. (5)

After attempts to extend Halsted procedure by extended or super radical mastectomy proved to be of little benefit, a minimally invasive trend emerged gradually. It started with

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modified radical mastectomy that spares the pectoral muscles and was then followed by breast conservative surgeries that leave the breast tissue behind. Finally skin sparing mastectomy appeared in order to conserve skin and facilitates breast reconstruction. (5)

Conservative surgeries have an aesthetic goal. The reason behind its existence is to preserve the normal aspect of the breast as much as possible contributing to the women's body image and self-esteem, otherwise we would still performing mastectomy for all cases considering this the gold standard for the surgical treatment of breast cancer. ⁽⁶⁾

The reconstruction techniques are: breast tissue advancement flaps, lateral thoracodorsal flaps, bilateral mastopexy, bilateral reduction mammoplasty, latissimus dorsi myocutaneous flap or complete skin sparing mastectomy with total reconstruction (latissimus dorsi myocutaneous flap with implant and abdominal flaps). (7)

To choose the appropriate technique we have to evaluate the breast volume, ptosis, tumor size and location. Intraoperative we have to evaluate the partial breast defect in relation to the initial breast volume, the size and location of the defect and the amount of breast tissue available. (7)

Finally in current essay, we will try to describe different methods of breast surgeries and present techniques of reconstruction in simple and informative way.