Oncoplastic Breast Surgery:
The New Frontier in Breast Cancer Surgical Treatment

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Winnie Henderson MD PhD
Northwest Surgical Specialists, LLP
Disclosure

- None
Objectives

- What is oncoplastic breast surgery?

- The psychosocial aspect of breast cancer diagnosis and how oncoplastic surgery can help improve quality of life in breast cancer patients

- Oncoplastic breast surgical techniques and results will be discussed
Which breast had oncoplastic lumpectomy & adjuvant radiation for breast cancer?
Surgical treatment for breast cancer: The Past

- **Detection**
  - Self breast exam or clinical breast exam
  - Mammogram

- **Goal for breast cancer surgery**
  - Excisional biopsy
  - Lumpectomy followed by radiation therapy
  - Mastectomy
  - Achieve negative margins
  - Cancer staging using axillary lymph node dissection
Surgical treatment for breast cancer: Today

- Detection
  - Self breast and clinical breast exam
  - Mammogram, US, MRI

- Goal for breast cancer surgery
  - Minimally invasive needle core biopsy
  - Trend toward breast conservation therapy (BCT) (75%)
    - Oncoplastic lumpectomy + radiation therapy
  - Mastectomy (25%)
    - Reconstruction should be offered
  - Achieve negative margins and minimize re-excision using oncoplastic technique to obtain wider excision
  - Cancer staging using sentinel lymph node biopsy
  - Achieve optimal cosmesis at the end of surgical therapy
    - Appearance of the breast after BCT or mastectomy is important
Surgical treatment of breast cancer: Today

- Role of the oncological breast surgeon:
  - Support & guide patient through their journey for breast cancer treatment
  - Preoperative optimization and individualize surgical options
    - Smoking cessation
    - Diabetic glycemic control
    - Lymphedema prevention
    - Working with other disciplines via referrals or as a member of Breast Leadership Team at a Breast Center
  - Individualize treatment according to oncology, size, location of cancer and patient’s preference
    - Size of tumor relative to size of breast volume remains a critical factor in determining BCT with optimal cosmetic result
  - Clarify patient’s goal & realistic expectation
  - Provide informed consent (loss of nipple function, nipple necrosis, skin flap necrosis, hematoma etc.)
Surgical treatment options for breast cancer: Today

- Breast Conservation Therapy (75%)
  - Traditional lumpectomy/partial mastectomy
    - Accelerated Partial Breast Irradiation
  - Oncoplastic lumpectomy/partial mastectomy
    - Whole breast radiation therapy

- Mastectomy (25%)
  - No reconstruction
  - With reconstruction
    - Tissue expanders and subsequent implants
    - Flap reconstruction
      - Latissimus dorsi
      - TRAM flap
      - DIEP flap
Surgical treatment for breast cancer - BCT

Traditional lumpectomy

Oncoplastic lumpectomy
Surgical treatment for breast cancer - mastectomy

Mastectomy without reconstruction

Mastectomy with immediate or delayed reconstruction
Oncoplastic Breast Surgery

“An evolving area of breast surgery that applies principles of surgical oncology and plastic & reconstructive surgery to the management of women with breast cancer”

Dr. Gail Lebovic
founder, School of Oncoplastic Surgery
Oncoplastic Breast Surgery

- Originate in a few centers in the world in 1980s
  - Hoag Hospital Breast Center, Van Nuys, California
    - Dr. Melvin Silverstein: “it is a philosophy that requires vision, passion, a knowledge of anatomy, and an appreciation and understanding of aesthetics, symmetry and breast function. The oncoplastic surgeon must be constantly thinking ‘How can I remove this cancer with large margins of normal tissue while at the same time making the patient look as good or better than she looks now?’
  - Dr. Silverstein’s goals
    - Complete removal of the lesion
    - Clear margins – the larger the better
    - Improve the quality of cosmetic outcome from BCT
    - Going to surgery one time to perform the definitive procedure
Advantages of oncoplastic breast surgery

- Studies for safe margins favors oncoplastic procedures when compared to lumpectomies and quadrantectomies
  - wider excision (reduce rate of re-excisions)
  - Glandular flaps (local tissue rearrangement)
- Local recurrence and survival rates with BCT (+XRT) are similar to mastectomy
- Decrease the need for mastectomy in large cancer or cancer in difficult locations
- Allow BCT in centrally located breast cancer
  - Round block technique
  - Central lumpectomy
  - Inverted T mammoplasty
Oncoplastic breast surgery

- Other goals
  - Team approach (oncological breast surgeon & plastic surgeon) working together to customize procedures for individual patient
  - Preserve breast volume, size, shape, projection of the affected breast and often symmetry with the contralateral breast
  - The improved appearance impact positively on psychosocial well-being of breast cancer patients
Oncoplastic breast surgery can improve appearance & quality of life

*Traditional lumpectomy*

*Oncoplastic lumpectomy*
Psychosocial aspect of breast cancer diagnosis

- Stress of breast cancer diagnosis, “Why me?”
- Blame oneself, depression, and anxiety
- Poor quality of Life
- Low self esteem
- Body Image
  - Fear of deformity or disfigurement with surgery
  - Less than attractive after breast surgery
- Scarring, altered or loss of sensation, changes at any donor sites, concerns about implants and complications of surgery
- Social
  - Relationship with others
  - Sexual relationship and dissatisfaction post reconstruction
- Adjusting to an altered body image after breast reconstruction is a lengthy process and may never be fully resolved
- Fear of recurrence
Psychosocial Benefits of Oncoplastic Approach to Surgery

“Enhancement, enrichment, empowerment“

- Trend is for “minimally invasive” biopsy and breast surgery so oncoplastic techniques are used in BCT to improve the aesthetic outcome
- Oncoplastic techniques are designed to reduce some “appearance” concern
- Offer ways to achieve symmetry with reconstruction, mammoplasty or mastopexy
- Allow women to return more quickly and confidently to their lives & relationships by improving their self esteem and without the psychological effect of deformity
- Detection of early stage breast cancer has increased as a result of SBE and mammogram. Survival is excellent. Techniques that improve symmetry and minimize deformity are important to allow women to live many years with the “new norm” after breast cancer treatment
Surgical treatment for breast cancer

*Oncoplastic lumpectomy on larger breasts give better cosmesis*
Surgical treatment for symptomatic breast tumor

Large 5 cm fibroadenoma excision in a A size cup breast using oncoplastic closure technique
Surgical treatment for breast cancer

Oncoplastic Lumpectomy for large tumor or re-excision may require future reduction mammoplasty on contralateral breast
Surgical treatment for recurrent breast cancer

Salvage Central Lumpectomy for Recurrent IDC in a poor surgical candidate who may otherwise not tolerate mastectomy
Surgical treatment for breast cancer

Oncoplastic Lumpectomy with inverted T mammoplasty incision for 6 o’clock IDC
Surgical treatment for symptomatic breast tumor

Giant 10 cm Pseudoangiomatous Stromal Hyperplasia resection in small breast 2 weeks postop
Bilateral mastectomies with tissue expander for large 10cm Phyllodes Tumor Resection

Surgical treatment performed jointly by breast & plastic surgeons.
Surgical treatment performed by breast surgeon & plastic surgeon

Mastectomy with

Flap Breast Reconstruction:

- Latissimus dorsi flap

- Abdominal flap
  - TRAM Flap (Transverse Rectus Abdominus Myocutaneous Flap)
  - DIEP Flap (Deep Inferior Epigastric Perforator Flap)
Summary

- Oncoplastic Breast Surgery is the newest surgical armamentarium in breast cancer treatment
- Avoid undesirable & disfiguring open biopsy and lumpectomy incision
- Increase success in achieving negative margins providing patient with one definitive surgery
- Patient should be given a choice for BCT using oncoplastic technique
- If mastectomy is desired, reconstruction with plastic surgery consultation should be offered
- Multidisciplinary approach to breast cancer care
  - Breast Center led by BLT conducts bimonthly Breast Tumor Conference
    - a network of physicians (breast surgeons, plastic surgeons, radiation oncologists, medical oncologists, radiologists, pathologists), physical therapists, psychologists, nurses and navigators all working together to offer our patients the best and most advanced breast care
  - Community network of care with primary care physicians and gynecologists help share decision making with our breast patients
Thank You