



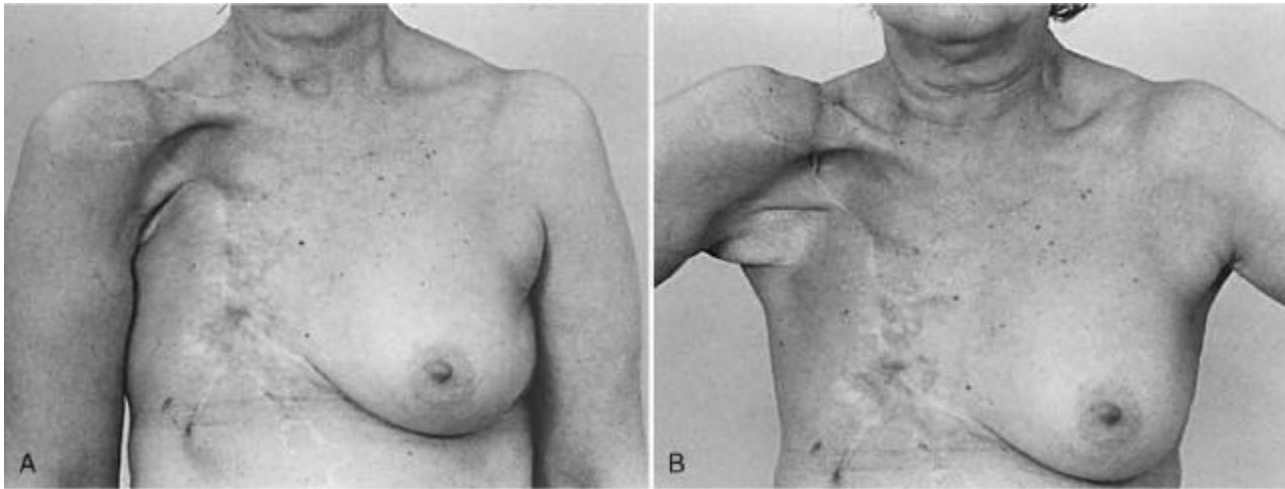
# BREAST SURGERY & RECONSTRUCTION

M. Sinnathamby

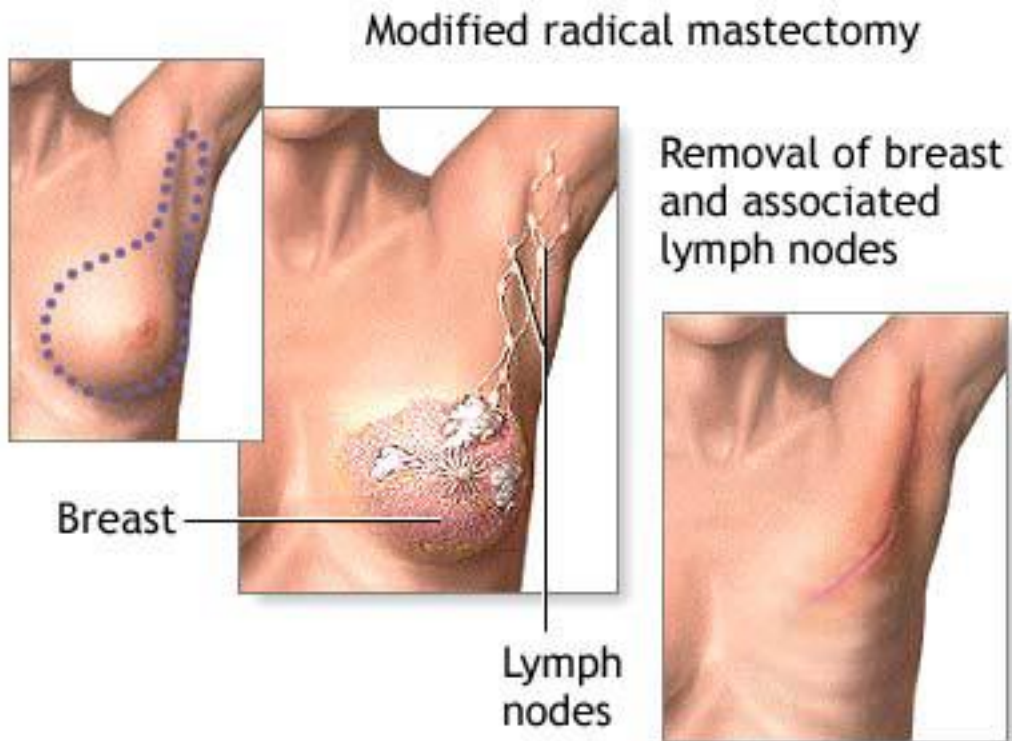
Breast and General Surgeon

# EVOLUTION OF BREAST SURGERY

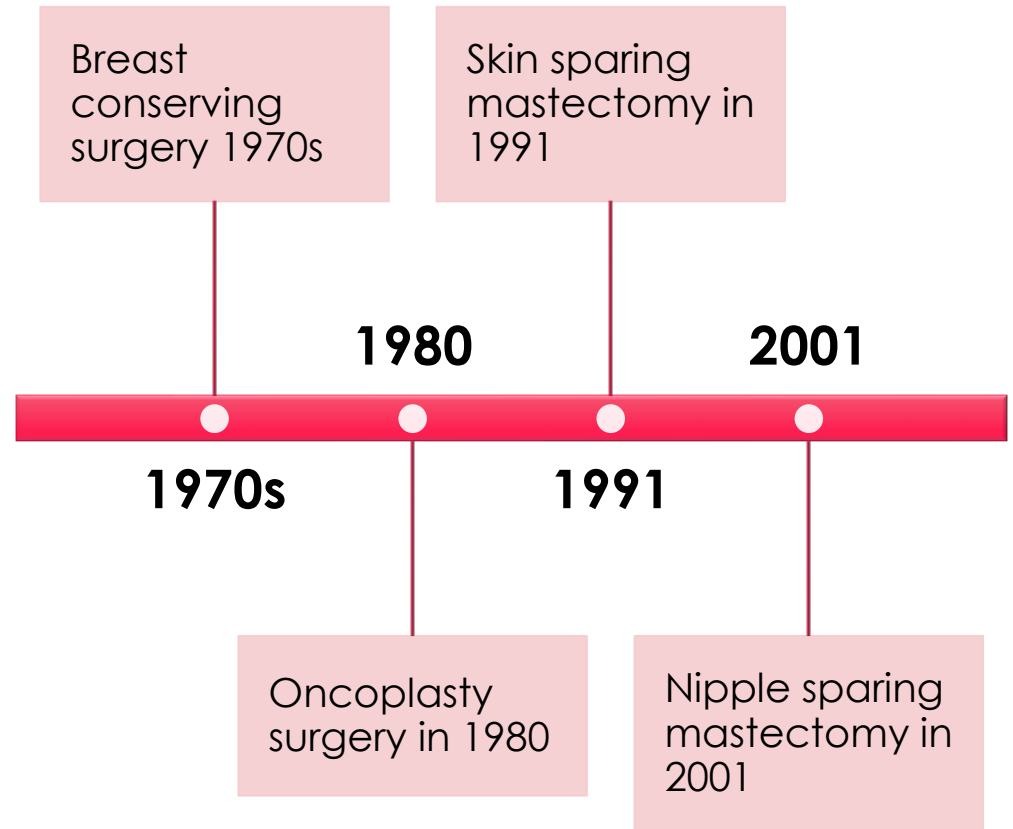
- Halsted Radical Mastectomy 1894




- Modified Radical Mastectomy 1948



# FURTHER CHANGES IN TECHNIQUE





## BREAST ONCOPLASTY SURGERY

Started to be used in 1980 – conservative form of breast surgery, better aesthetic and quality of life outcome with less morbidity compared to traditional approach

Current definition – any breast surgery that aims to maintain quality of life and acceptable breast appearance without compromising oncological effectiveness

# BREAST CONSERVING ONCOPLASTY SURGERY

Allows up to 50% of  
breast tissue excision

Terminology

Level 1 oncoplasty

Level 2 oncoplasty

# ANOTHER WAY OF LOOKING AT ONCOPLASTIC TECHNIQUES

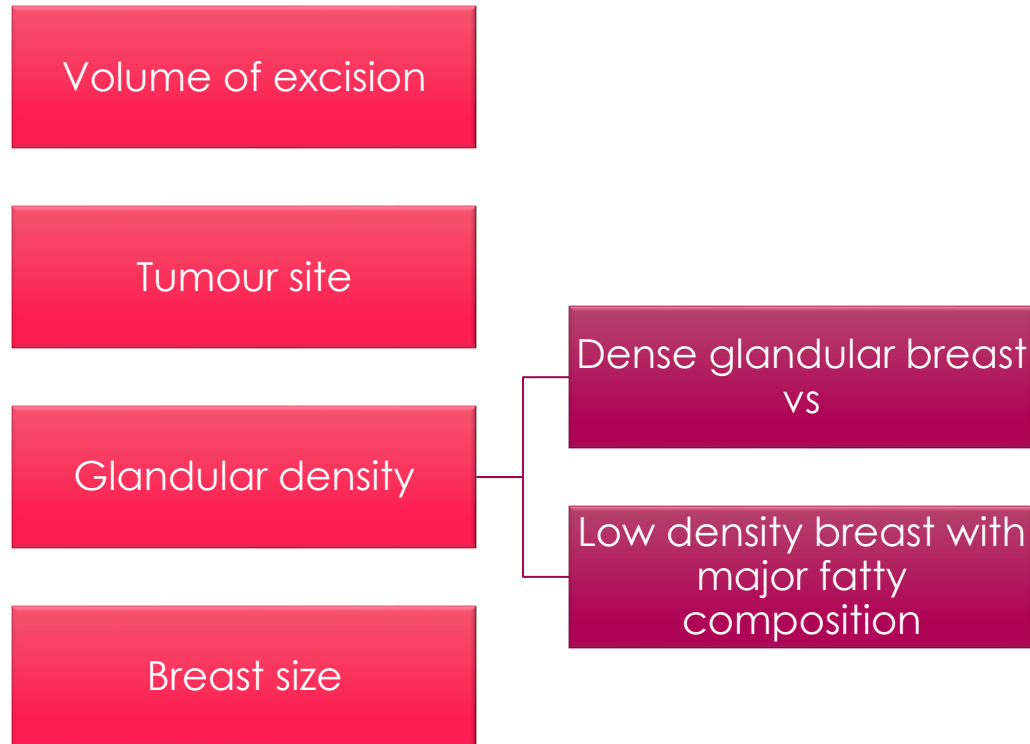
## Volume displacement techniques

- Allow use of remaining breast tissue for glandular reshaping or reduction techniques

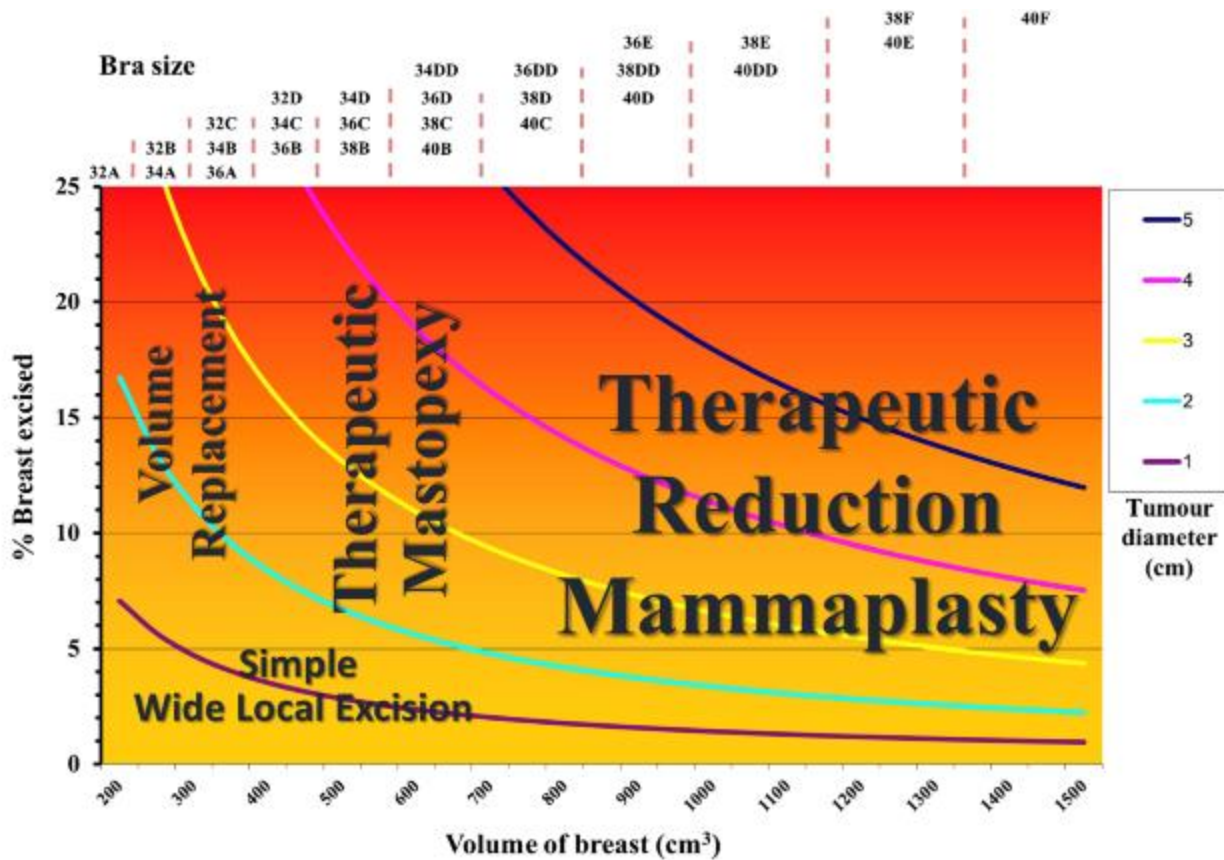
## Volume replacement techniques

- Volume of excised breast tissue replaced with autologous tissue

# SELECTION CRITERIA

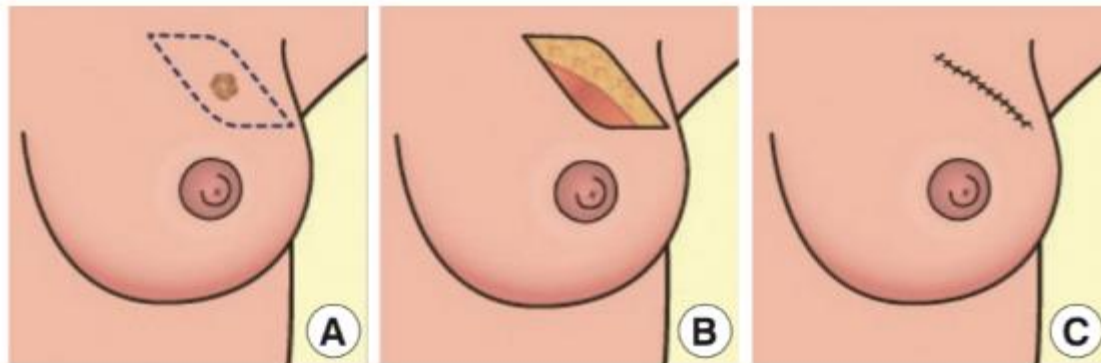




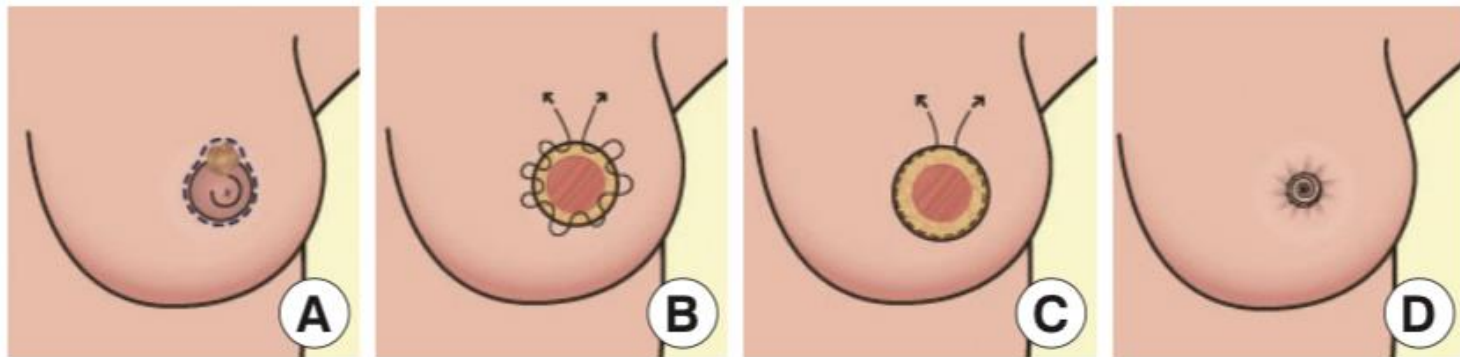


# VOLUME DISPLACEMENT

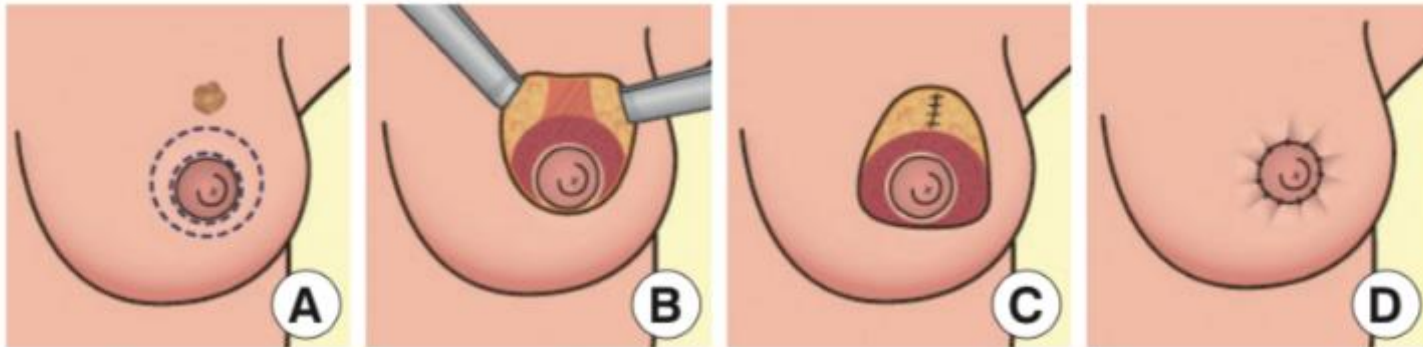
- Glandular reshaping
  - Parallelogram mastopexy lumpectomy



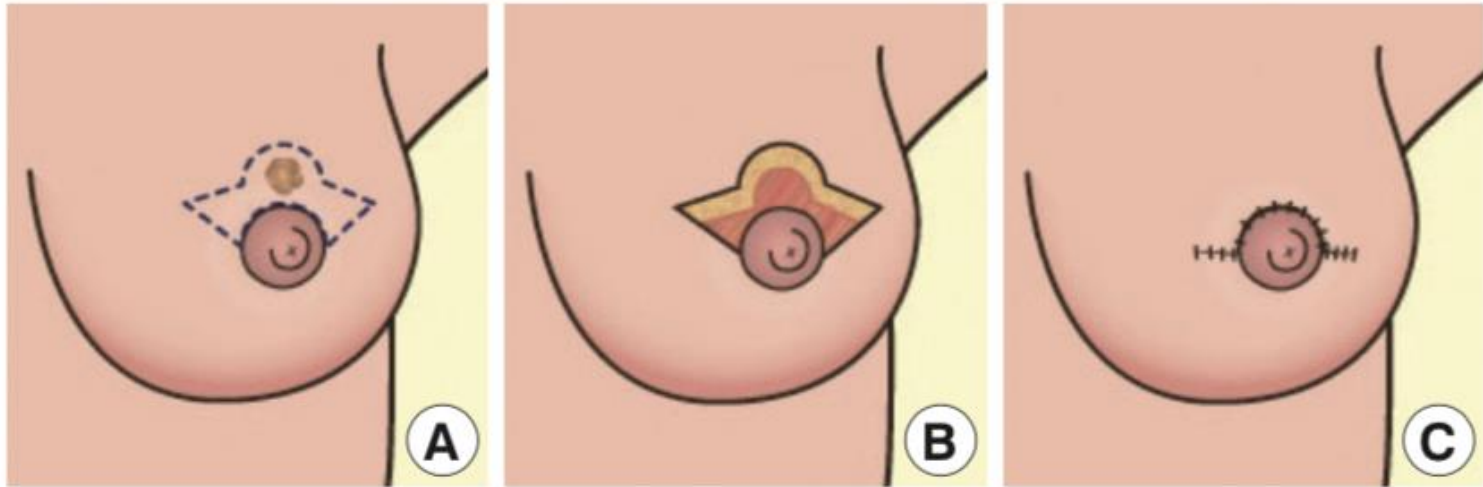
- Purse string suture



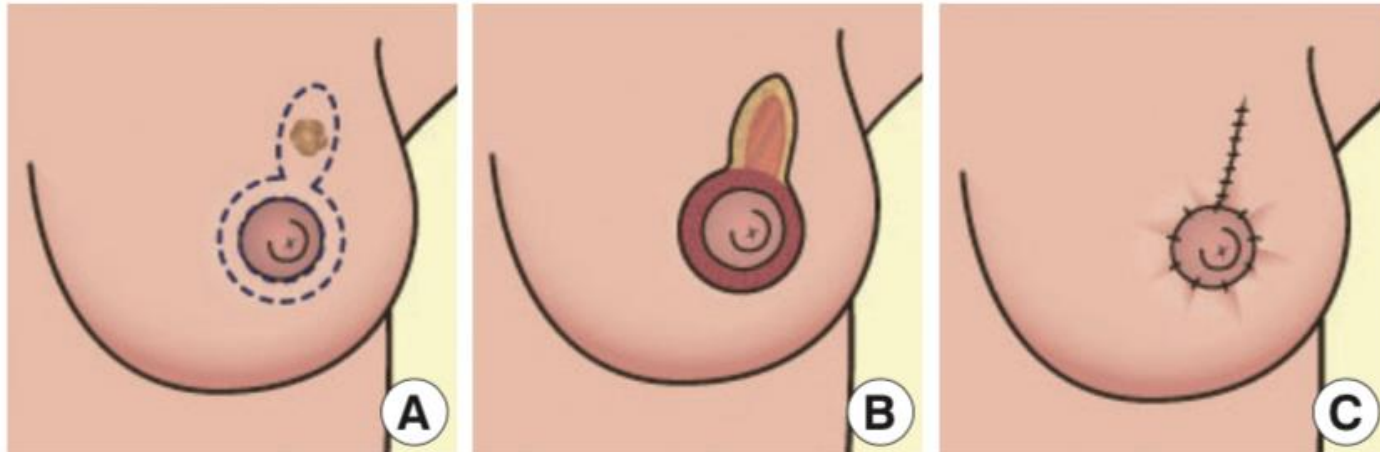
- Round block technique



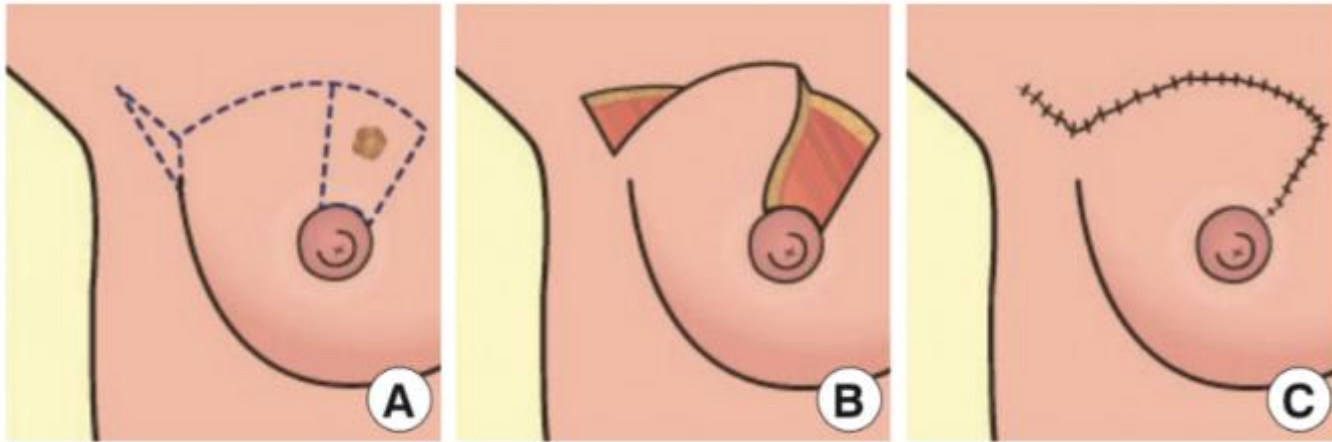
- Batwing Mastopexy

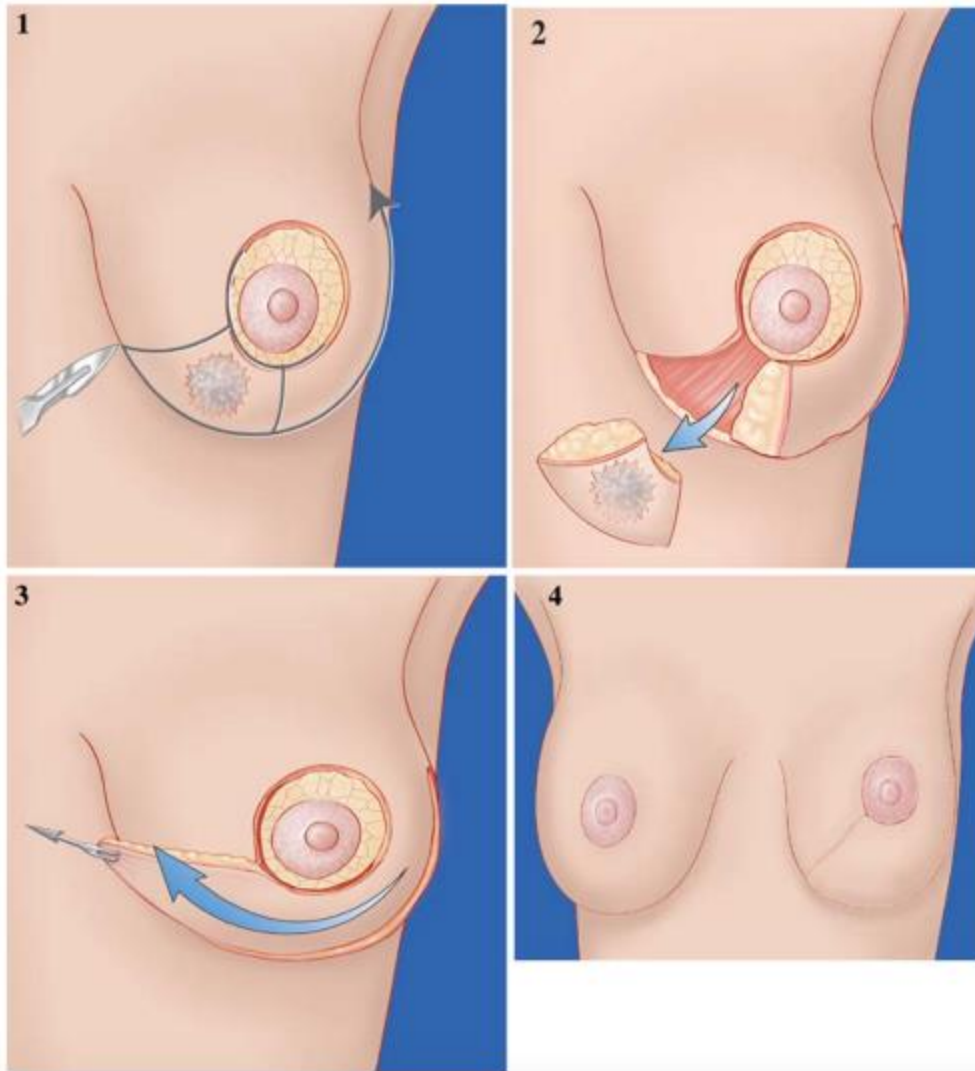


- Tennis racket



- Rotation flap



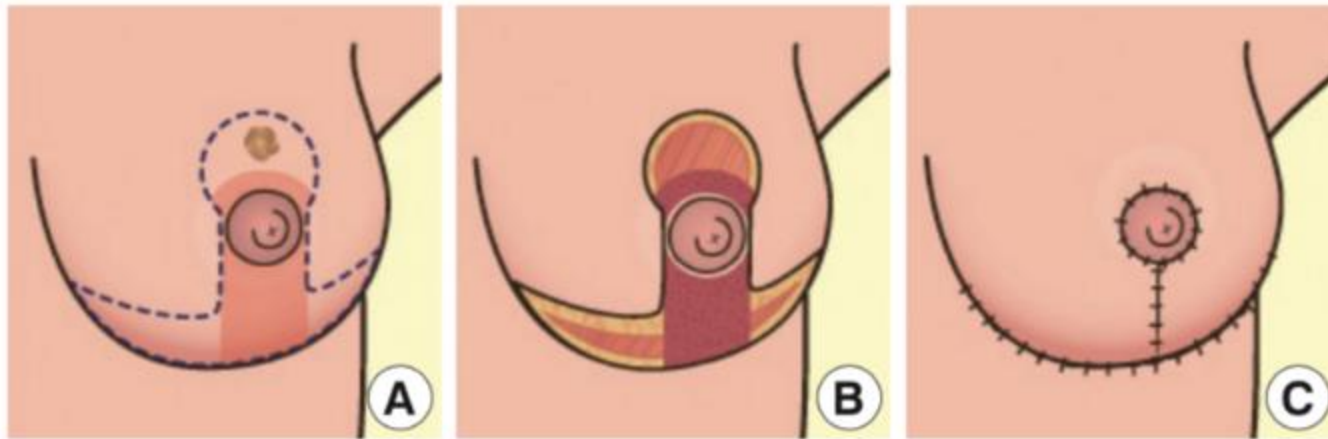


V Mammoplasty

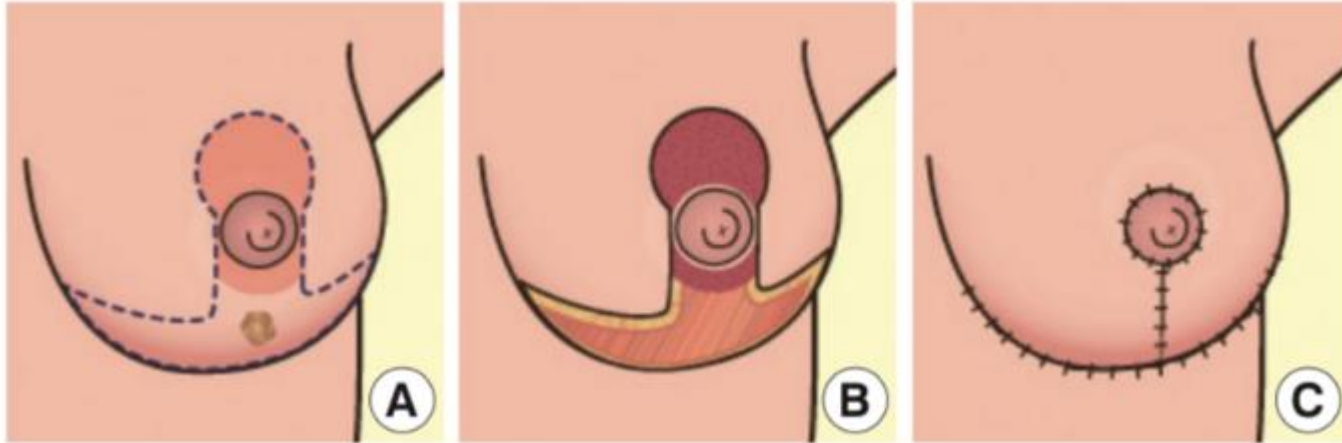


# REDUCTION MAMMOPLASTY

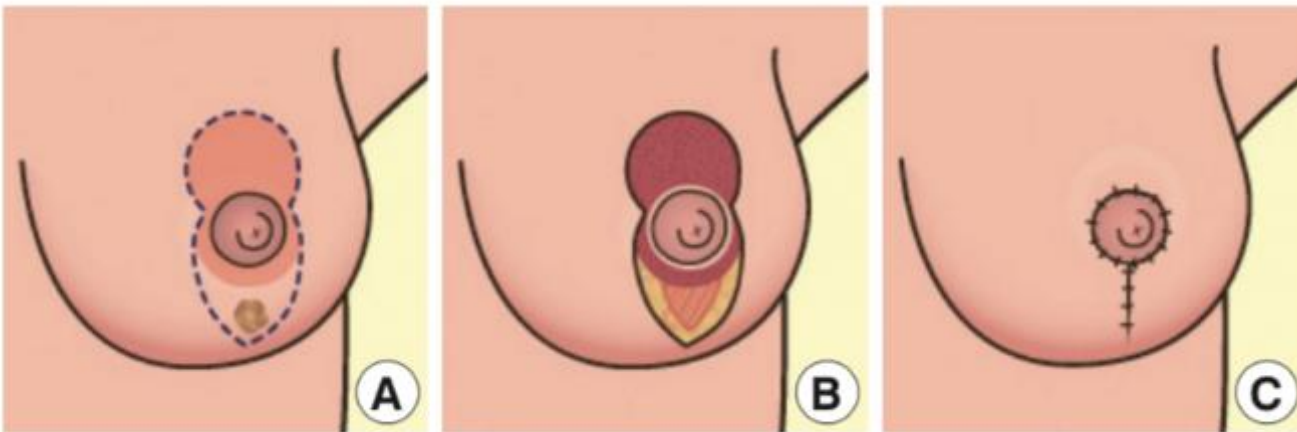
- Wise pattern inferior based pedicle



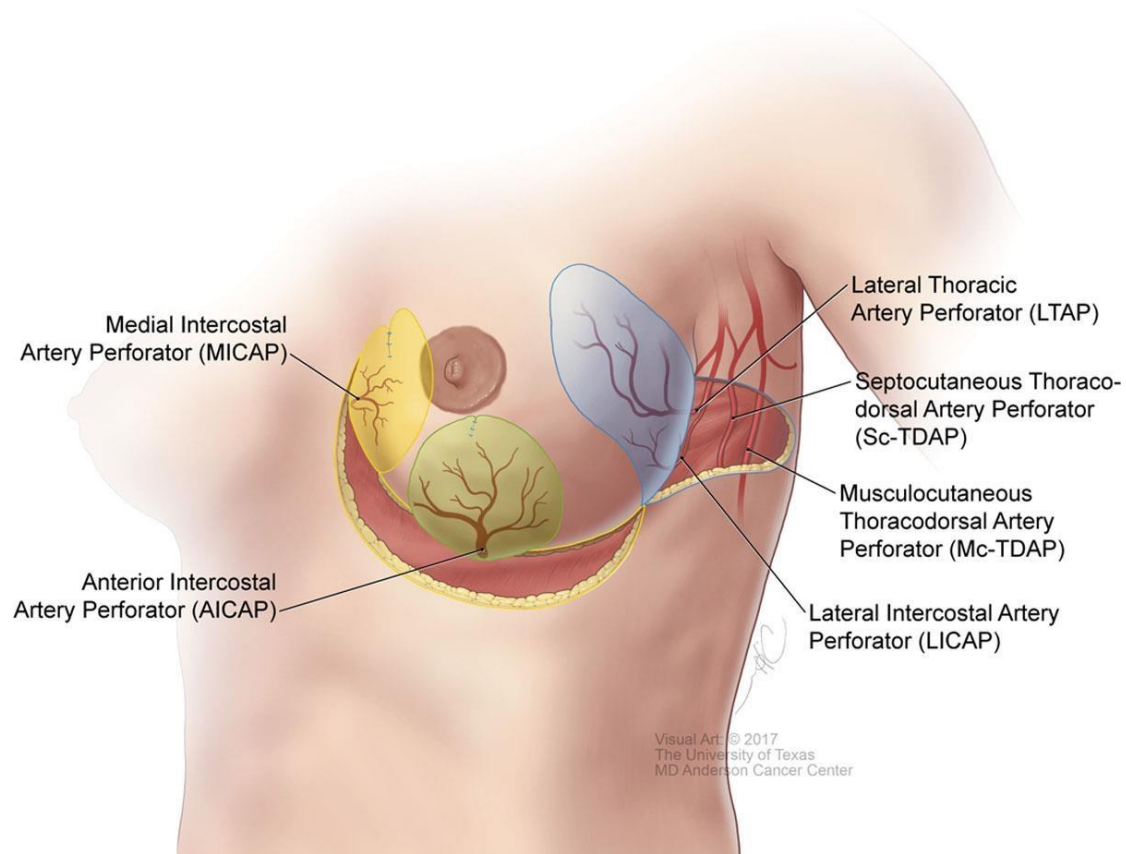
- Wise pattern superior based pedicle



- Vertical reduction



# VOLUME REPLACEMENT



- LD myocutaneous flap



# MASTECTOMY

May be necessary from  
oncological point of view



Better aesthetics with  
reconstruction



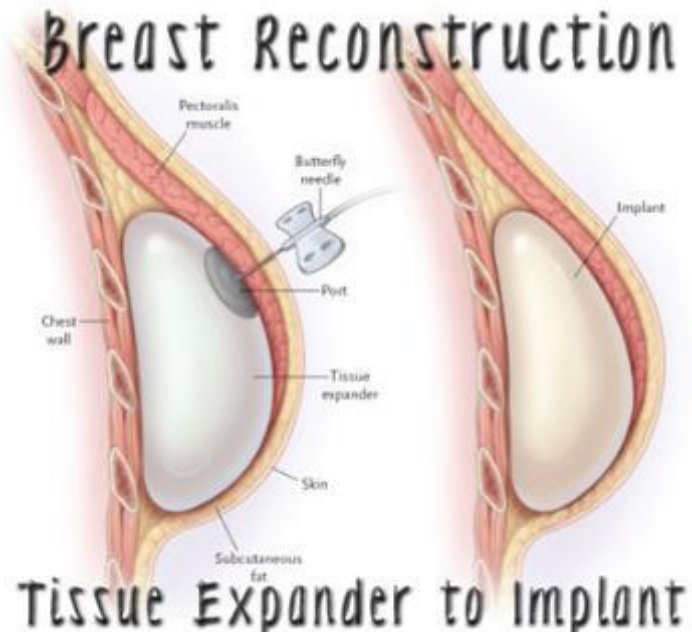
Total, skin sparing , skin and  
nipple sparing



# BREAST RECONSTRUCTION

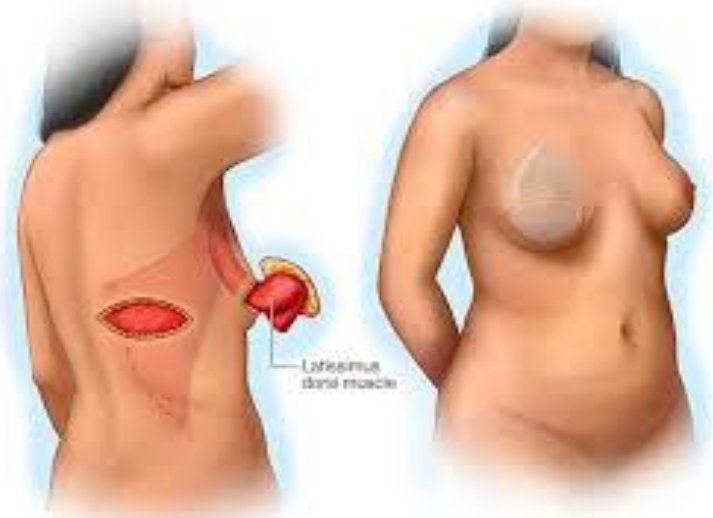
- It is often a journey rather than a single surgery
- Implant based, autologous or flap based and combination of both
- May need revision surgery later
- Appearance may change over time with changes of weight and body habitus

# IMPLANT RECONSTRUCTION

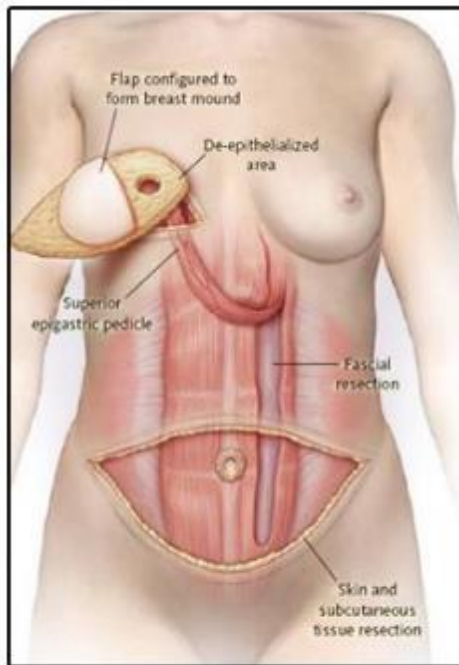




# LD PEDICLE RECON

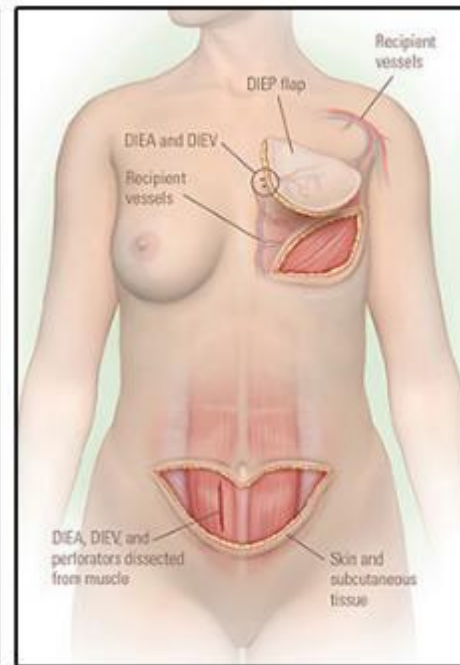


# TRAM/DIEP RECON



**TRAM Flap**

Lower abdominal skin, fat and one of the rectus muscle are transferred to the mastectomy site and contoured appropriately to reconstruct the breast.



**DIEP Flap**

The DIEP flap also uses the skin and fat from the lower portion of the abdomen, but spares the rectus muscle.



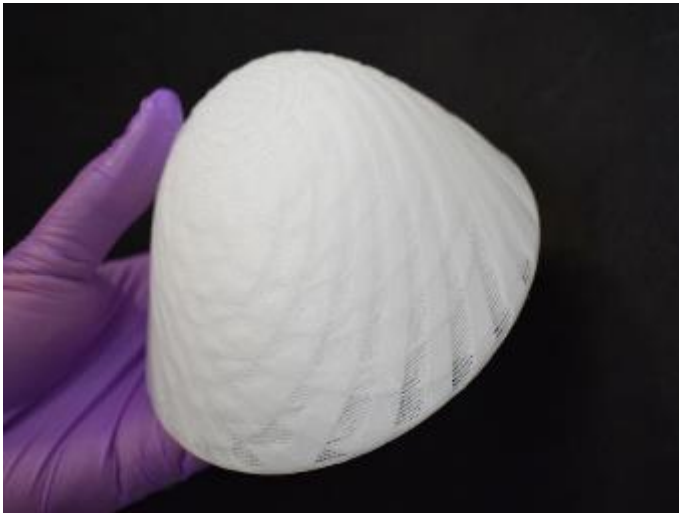
# FAT GRAFTING

Liposuction and transfer of fat to breast

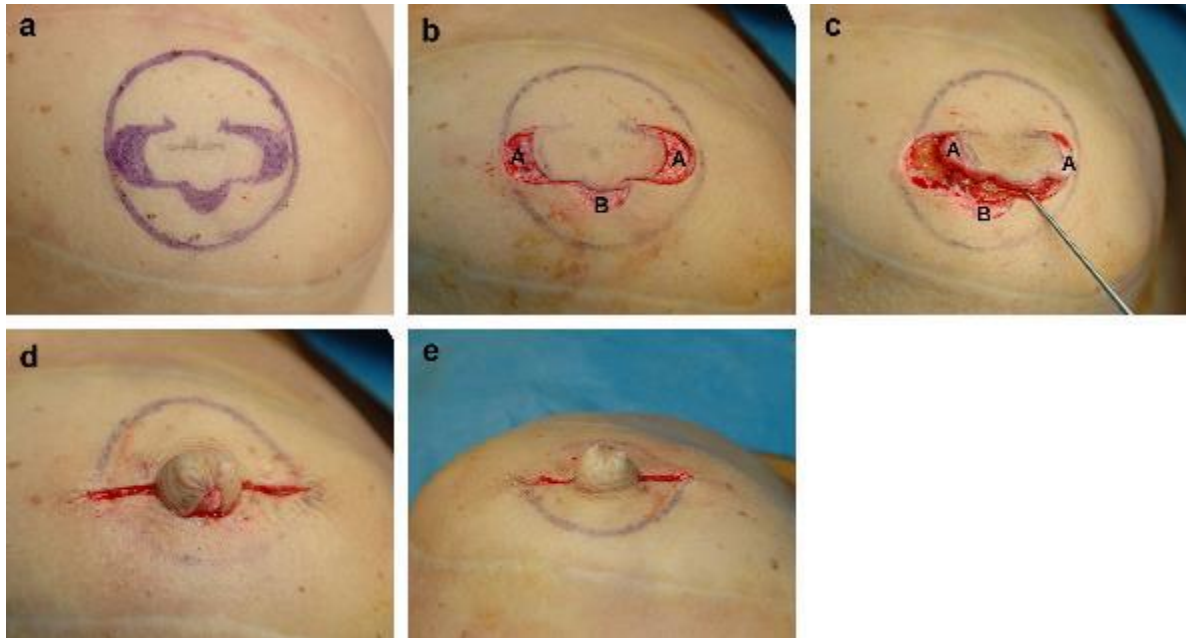
Used mainly to address defects or augmentation but can be used for complete reconstruction

Will require multiple sessions depending on the amount of fat required

# NEW TECHNIQUE ON TRIAL



# NIPPLE RECONSTRUCTION



# REFERENCE

- Improving Breast Cancer Surgery – a classification and quadrant per quadrant atlas for oncoplastic surgery, Krishna B Clough; Ann Surg Oncol DOI 10.1245/s10434-009-0792-y
- Surgical Techniques for Personalized Oncoplastic Surgery in Breast Cancer – Patients with small to moderate-sized Breasts (Part 1) volume displacement; Jung Dug Yang, Journal of Breast Cancer 2012 March 15 (1):1-6
- Surgical Techniques for Personalized Oncoplastic Surgery in Breast Cancer – Patients with small to moderate-sized Breasts (Part 2) volume replacement; Jung Dug Yang, Journal of Breast Cancer 2012 March 15 (1): 7-14
- Oncoplastic Breast Surgery: What, when and for whom? R Douglas Macmillan; Curr Breast Cancer Rep (2016) 8:112–117