Type 1 Oncoplastic Techniques

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Aims of OS:

- Improve long-term cosmetic outcomes after BCS
- Allow excision of >20% breast tissue or excision of tumors located in “Adverse” locations without loss of oncological safety.

- Classified into volume displacement (often also termed therapeutic mammoplasty techniques) and volume replacement which may be subdivided into lipofilling and flap-based techniques.

Bilevel Classsification OPS

- Level 1:

If less than 20% of the breast volume is excised, a level I procedure is often adequate. These procedures can be performed by all breast surgeons without specific training in plastic surgery.

- Level 2:

Anticipation of 20–50% breast volume excision will require a level II procedure with excision of excess skin to reshape the breast. They are based upon mammoplasty techniques and require specific training in OPS.

OBS classification

Chatterjee et al, 2019

Technique	Classification/ Definition	Examples
Volume displacement	Level 1: <20% breast tissue removed	Local tissue rearrangement
		Crescent mastopexy
	Level 2: 20–50% of breast tissue removed	Reduction mammoplasty
Volume replacement	> 50% of breast tissue removed	Implant-based reconstruction
		Local/regional flap reconstruction
		Thoracodorsal artery perforator, etc

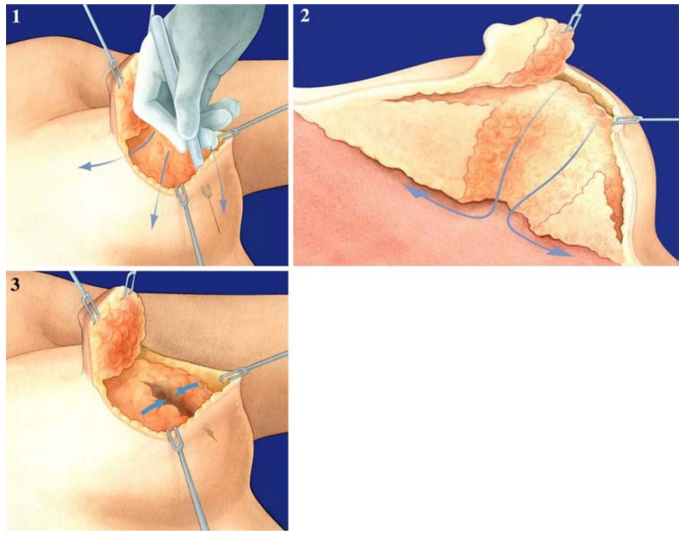
TABLE 1 Oncoplastic decision guide

Criteria	Level I	Level II
Maximum excision volume ratio	20%	20–50%
Requirement of skin excision for reshaping	No	Yes
Mammoplasty	No	Yes
Glandular characteristics	Dense	Dense or fatty

Steps of type 1 OPS

TABLE 2 Level I OPS: step-by-step surgical approach

Procedure	Result
Skin incision	Allows wide access for excision and reshaping
Skin undermining	Facilitates wide excision and glandular mobilization for reshaping
NAC undermining	Avoids displacement of nipple towards excision defect
Full-thickness excision	Prevents anterior and posterior margin involvement
Glandular reapproximation	Late-occurring deformity is avoided
Deepithelialization and NAC repositioning	Recenters NAC on new breast mound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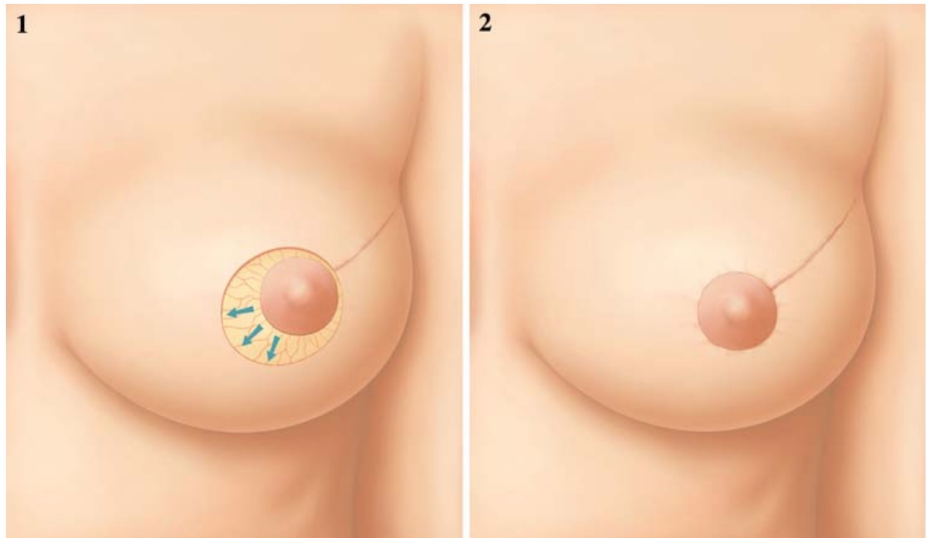
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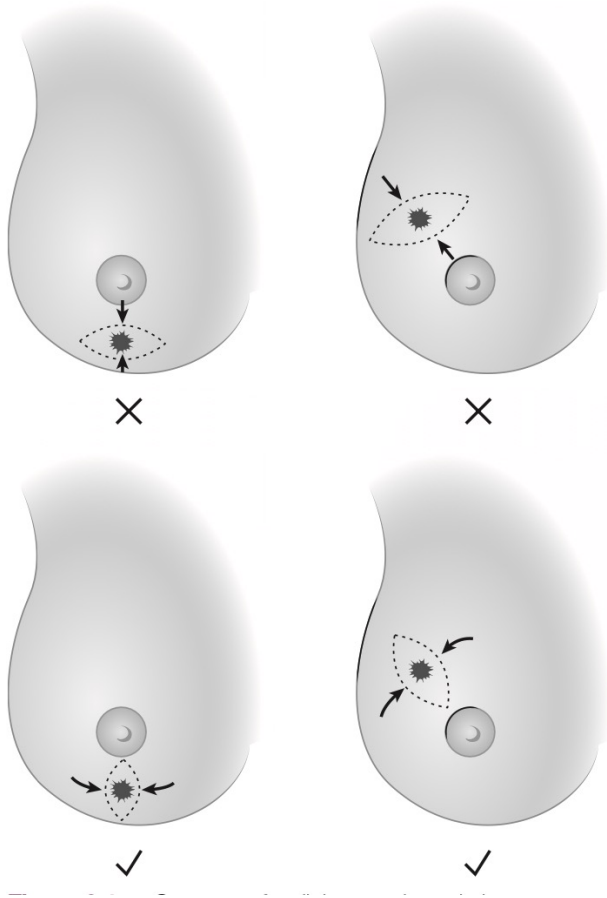
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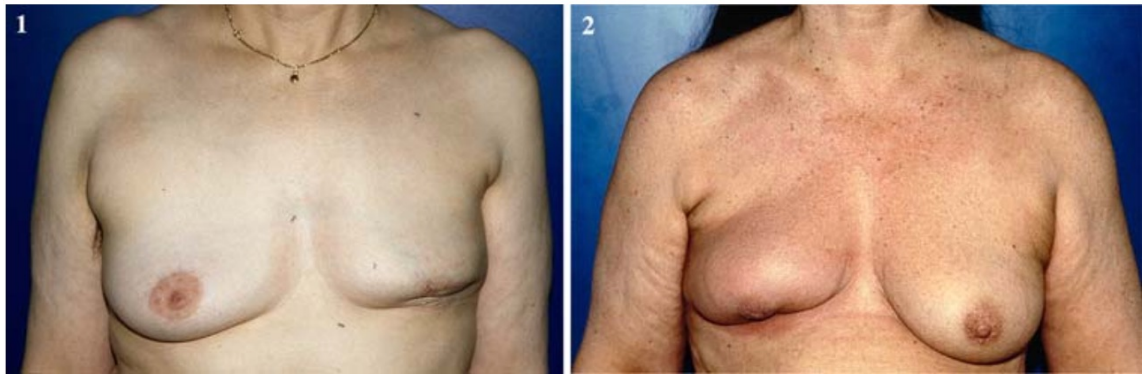
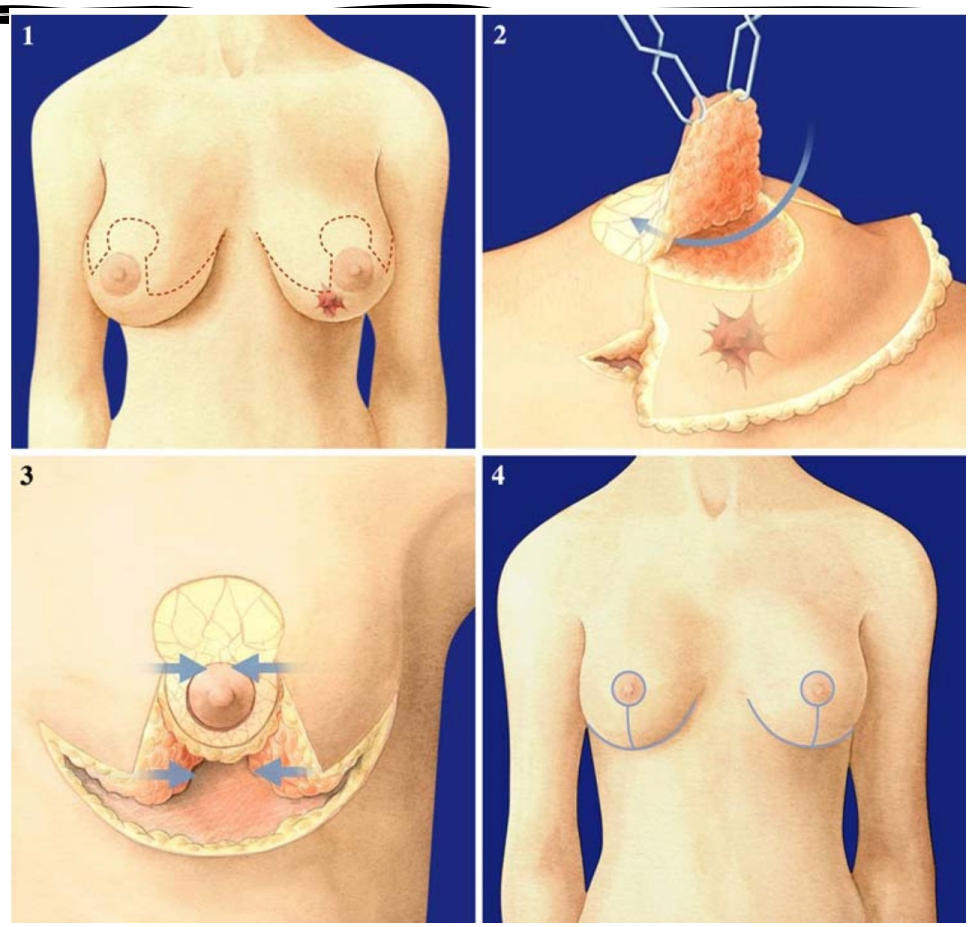
Something to note....

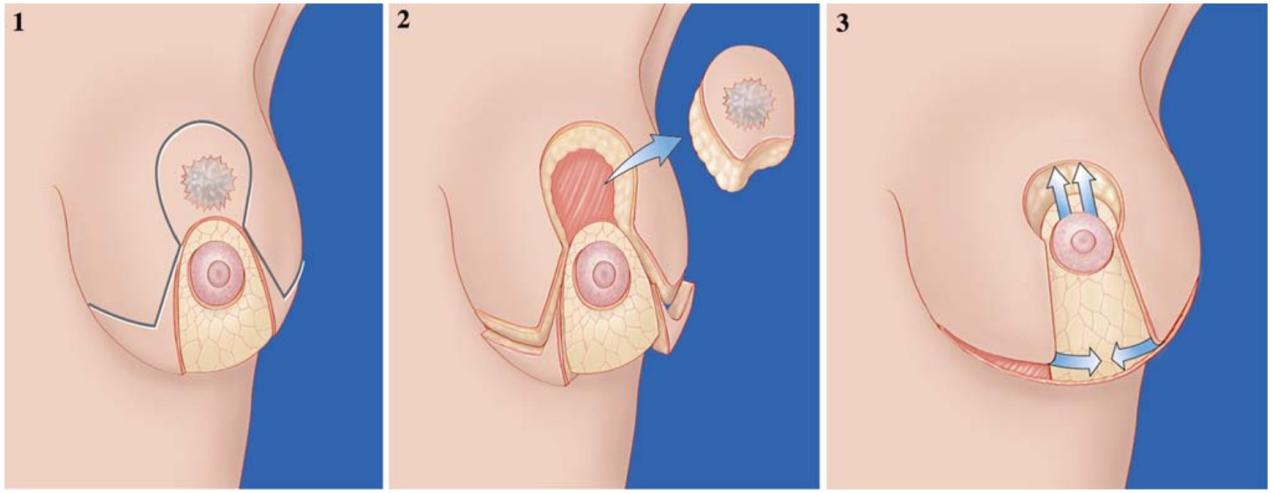
- Clear Margins
- Tumour Orientation
- Tumor bed markings
- Cavity shave

Why use OPS techniques...





PICTURE 6 1, 2 Upper pole deformity



Basic Principles of OPS....

- *Maintain breast form and shape – sometimes keeping a normal-looking breast on the cancer side may be at the expense of overall symmetry.*
- *Perform the simplest procedure that gives an acceptable result.*
- *Only perform techniques within your own skill set.*
- *Do not compromise on the wide local excision to facilitate better cosmesis.*
- *Choose safety over perfect cosmesis – for some women a safer procedure that means accepting a small deformity, asymmetry or less than perfect appearance is still a much better option than the alternatives.*
- *Aim for all necessary surgery to be completed at one operation (including symmetrisation if required).*

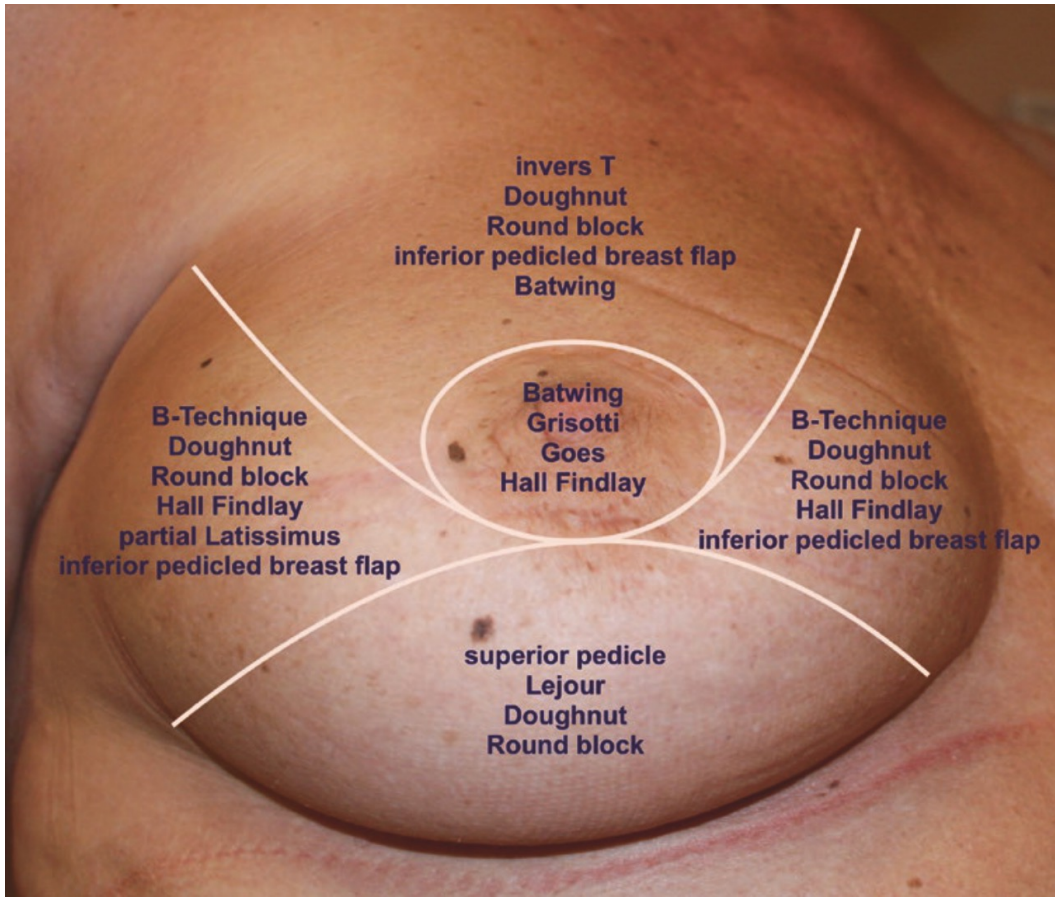
Indications of OS

- *Adverse tumor to breast volume*
- *Adverse tumour location (superomedial, central/sub- areolar, inferior).*
- *Redo conservation surgery.*
- *Multifocal and multicentric disease.*
- *Macromastia*
- *risk of margin involvement*
    - *DCIS – with or without invasive disease*
    - *Invasive lobular cancer*
    - *Women of young age*
    - *Large tumour size*

Factors to note when choosing pts…

- *Excision volume*
- *Tumor location*
- *Gland density/ degree of ptosis*
- *Hx of smoking, Dm, High BMI, NACT & other known factors*
- *Possibility of future RT*
- *Previous scars*
- *Need for contralateral reduction*
- *PT WISH…*

Level 1 Oncoplastic Techniques..



Donut/Benelli/round block technique...

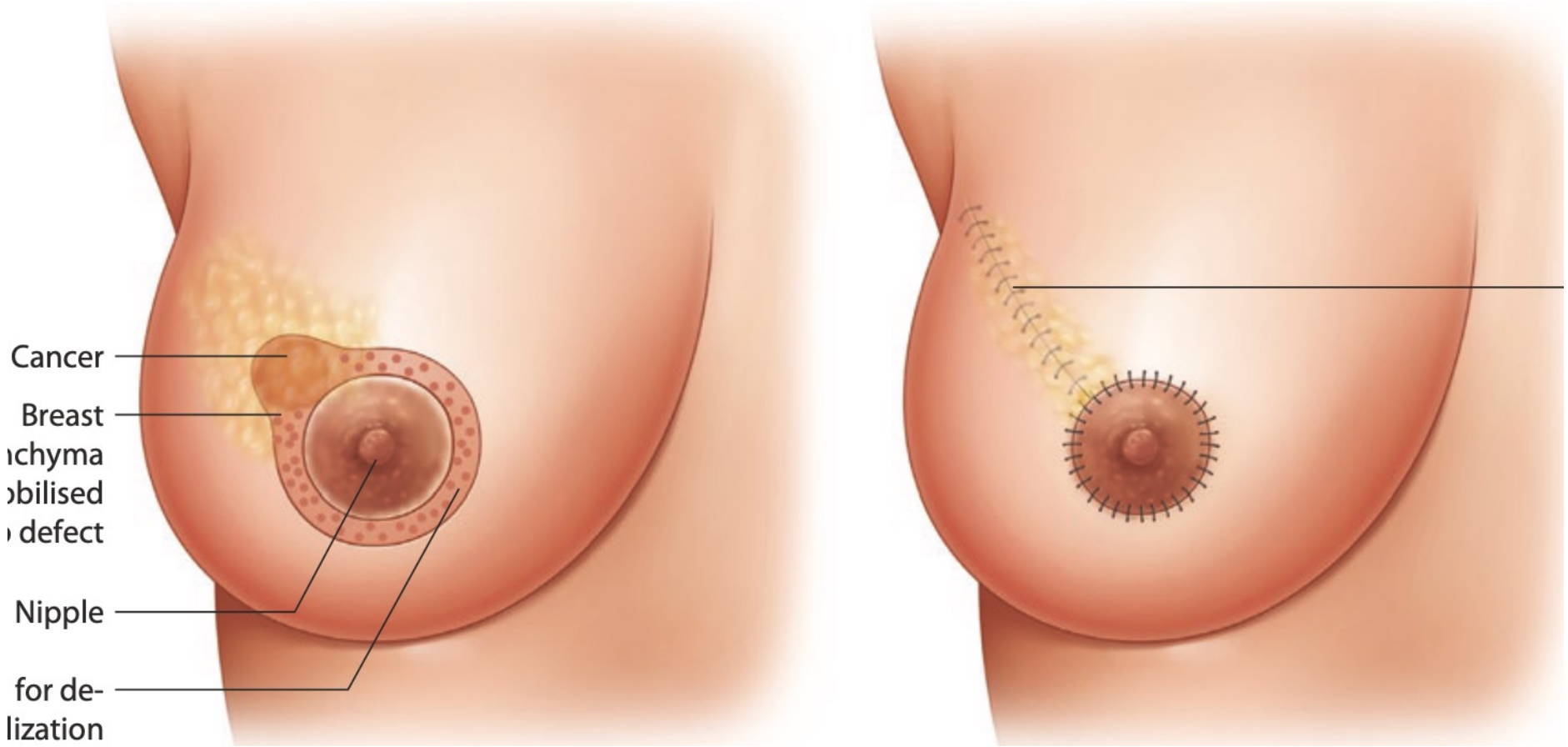
- Indications

-Peroareolar tumors upto 3 cm from edge of areola

-small and medium size breast

-Minimal or no ptotic breasts

Donut Technique...



Benelli/doughnut technique...

Grissoti Flap..

- Central tumours account for 5 to 20% of breast cancer
- Central tumours more than 3 cm from the nipple areola complex are considered peripheral
- Central tumours have a higher risk of local recurrence and worse over survival
- Grotty flaps indicated one less than 20% pressed volume needs to be excised
- Rely on local rotational advancement flap and inferior based derma glandular pedicle which subsequent nipple reconstruction

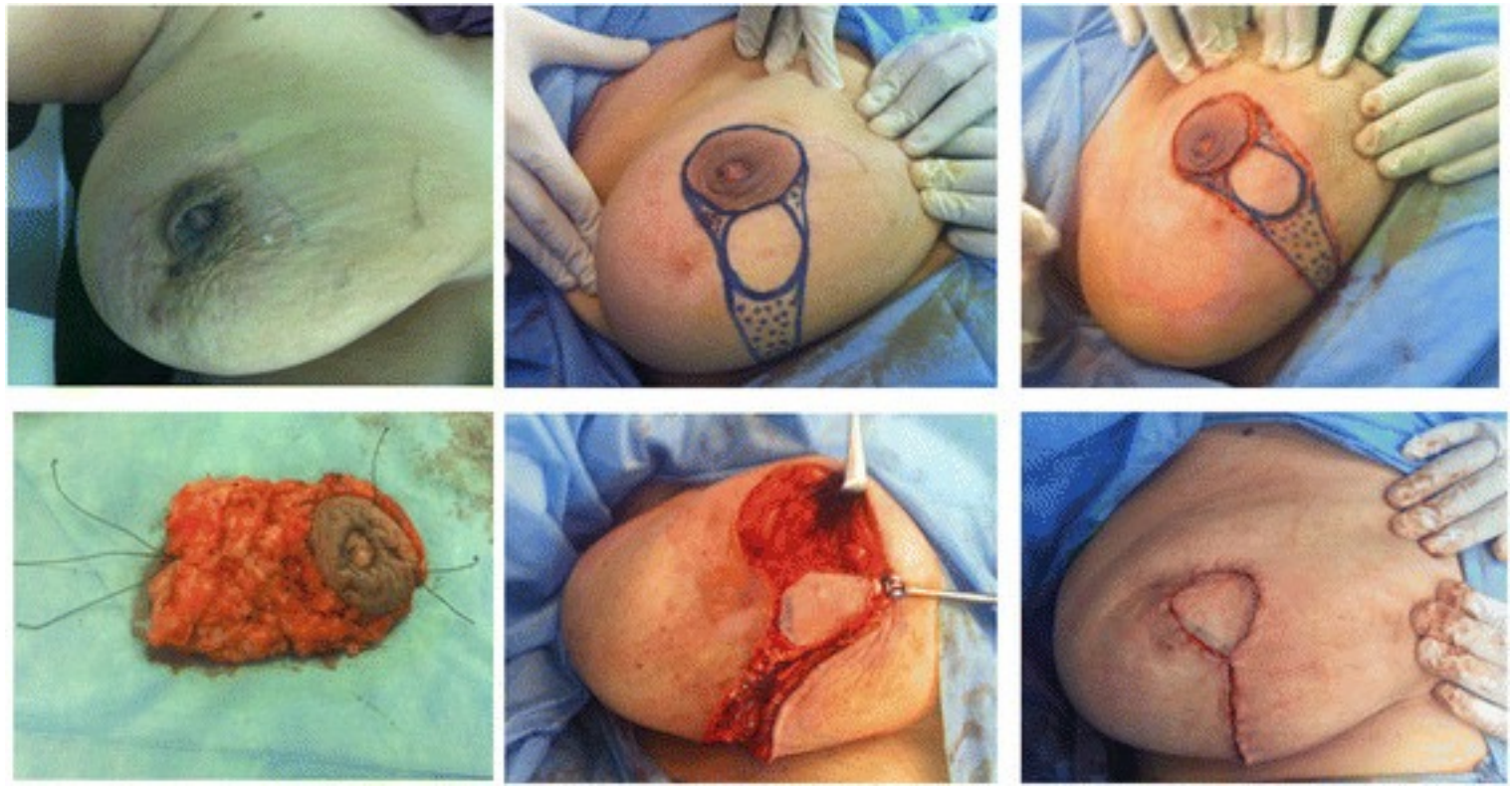
Indications

- Wide local excision with NAC resection(retro Areolar tumours, pagets disease)
- More than grade one Ptosis
- Adequate NAC-IMF distance
- Little change breast size and shape desired

- Contraindications
- Significant NAC elevation required
- Significant breast volume reduction required
- Previous breast surgery
- Small size, no ptosis
- Peripheral tumours
- Multicentric tumours

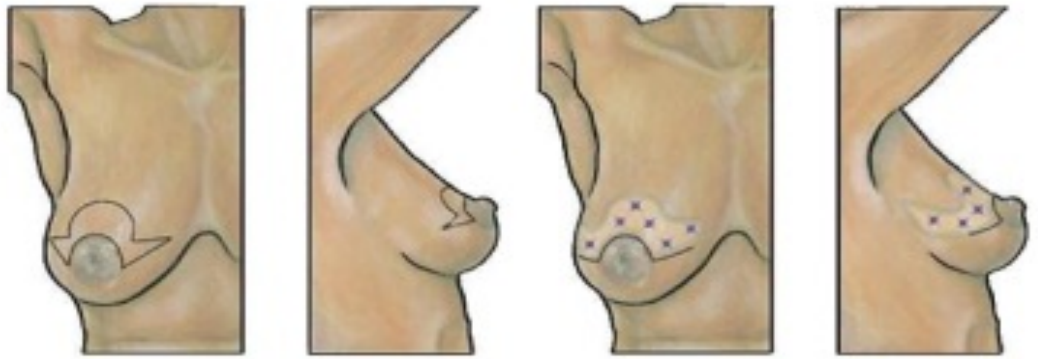
-Inflammatory breast cancer

-usual contraindicators to OBS



Batwing Mammoplasty..

- Upper & central tumors +/- skin involvement
- Pagets disease
- Moderate to Large ptotic breasts
- Nipple Ptosis
- Skin reduction
- Short N-IMF
- Not suitable/undesirable Wise Pattern



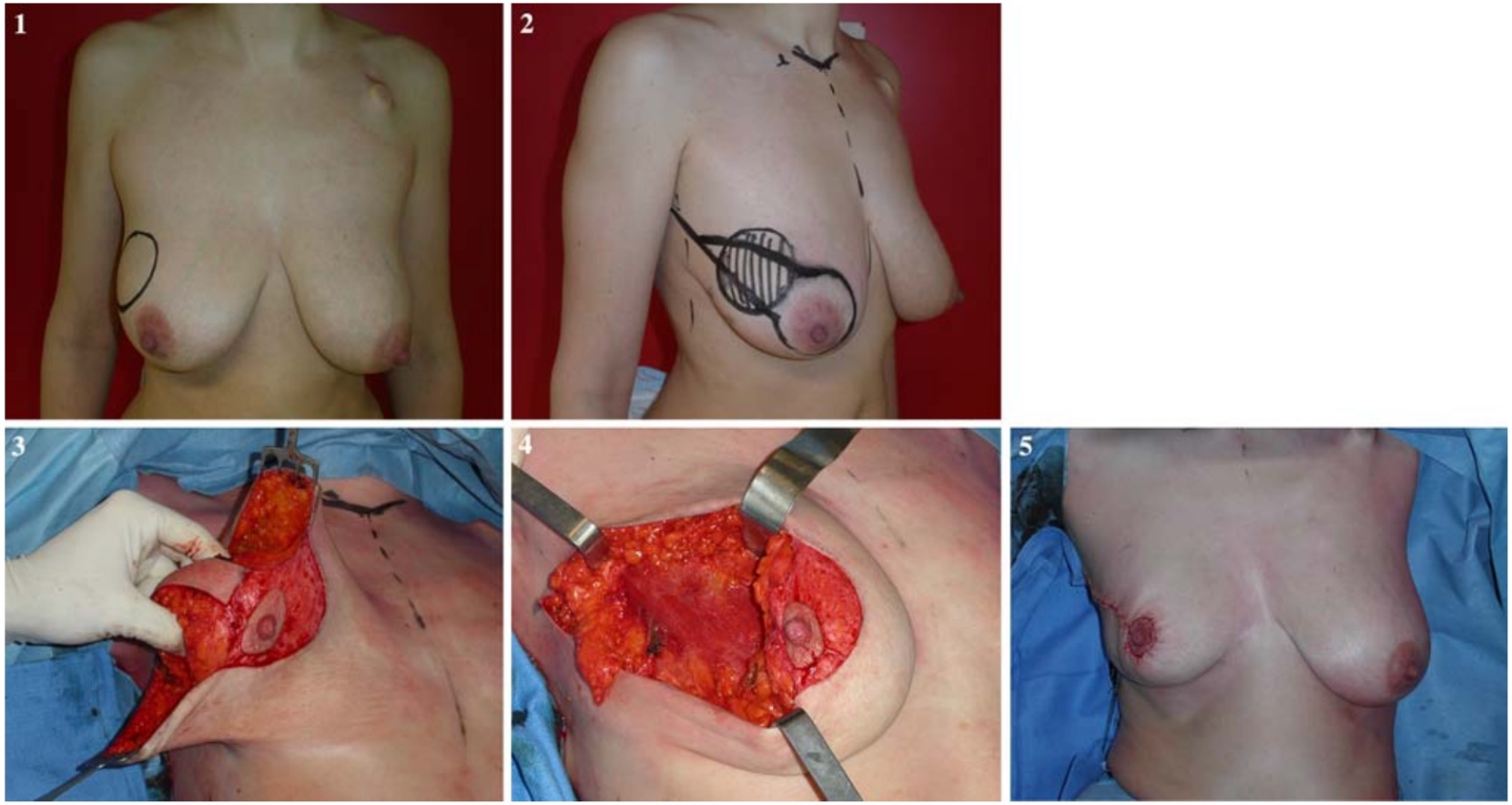
(a) Batwing incision

(b) Possible tumor locations

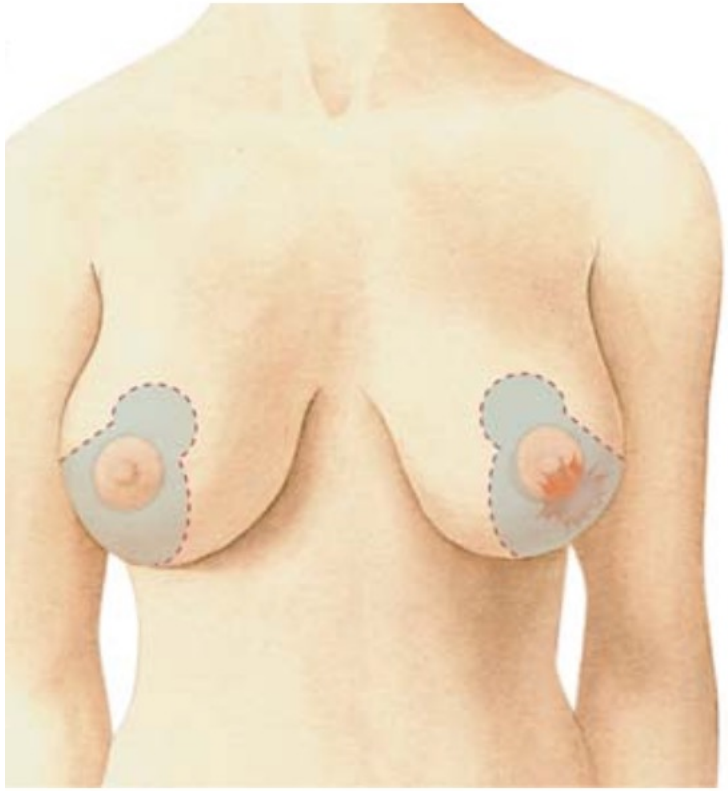
(c) Resection cavity with specimen

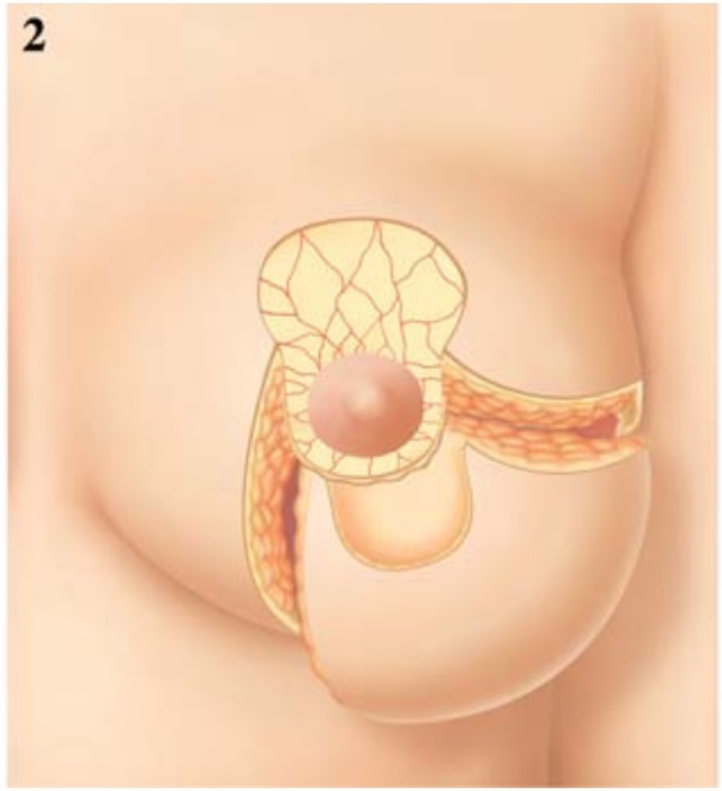
(d) Closed Batwing incision

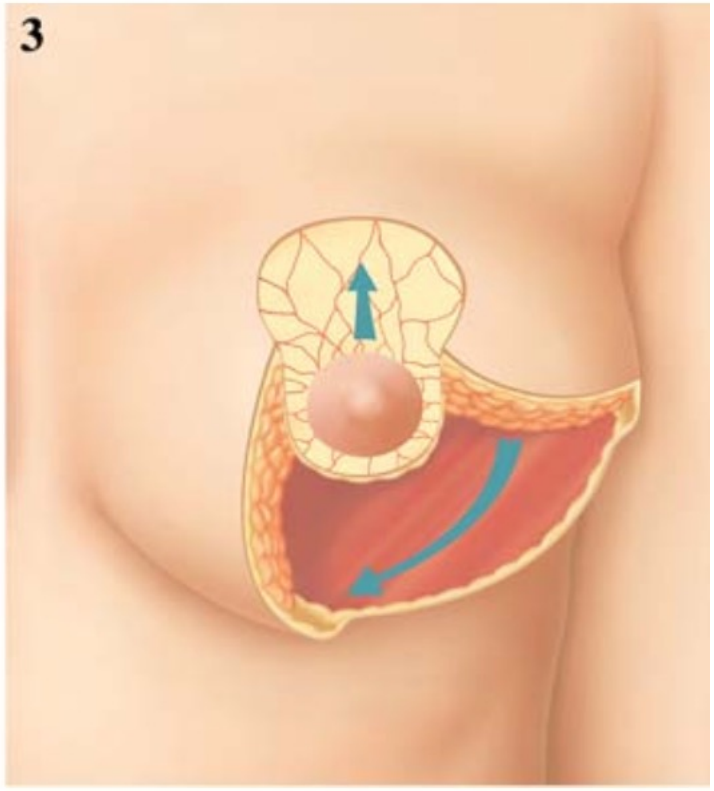
Raquet mammoplasty...



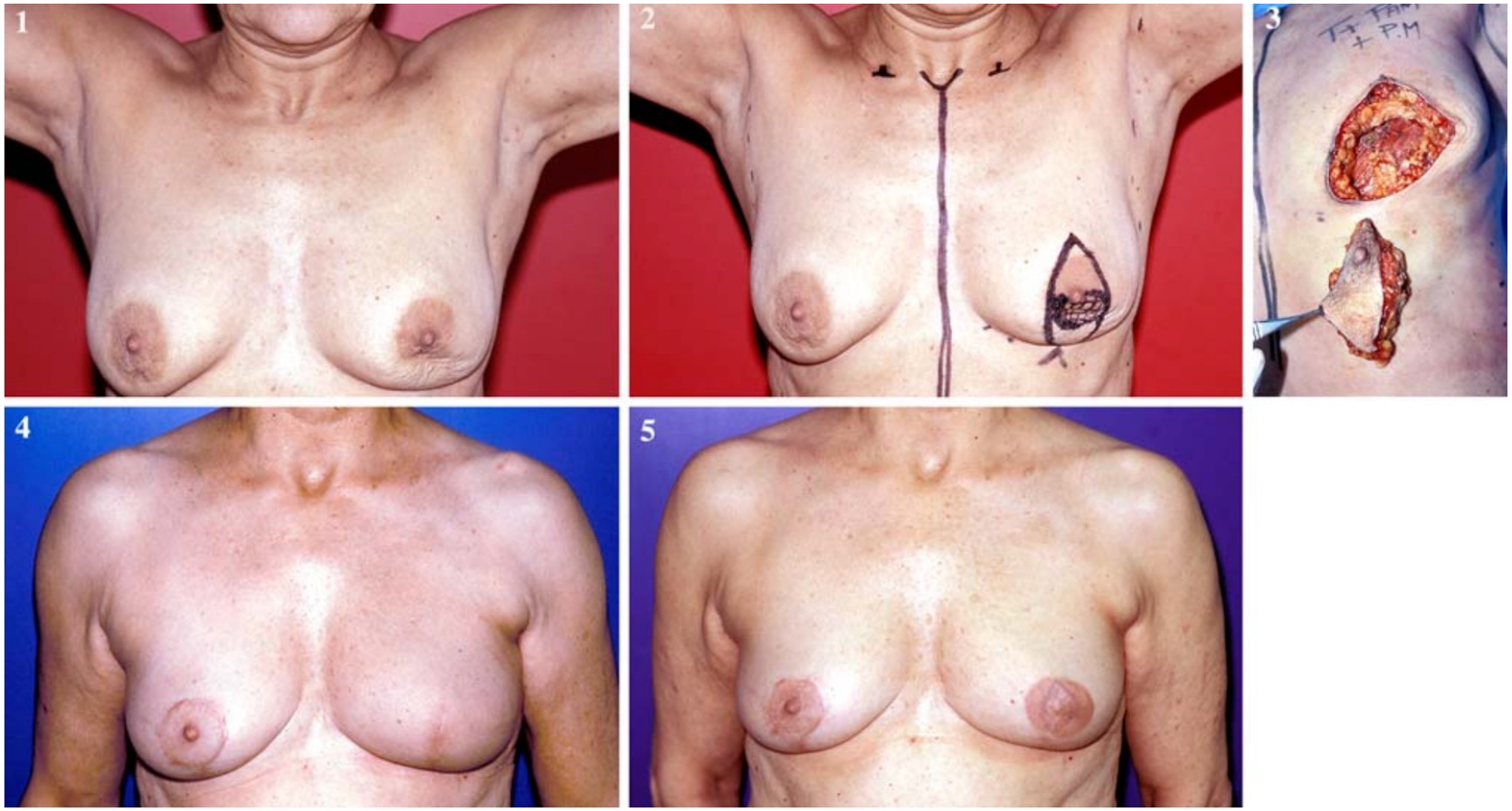
J mammoplasty...



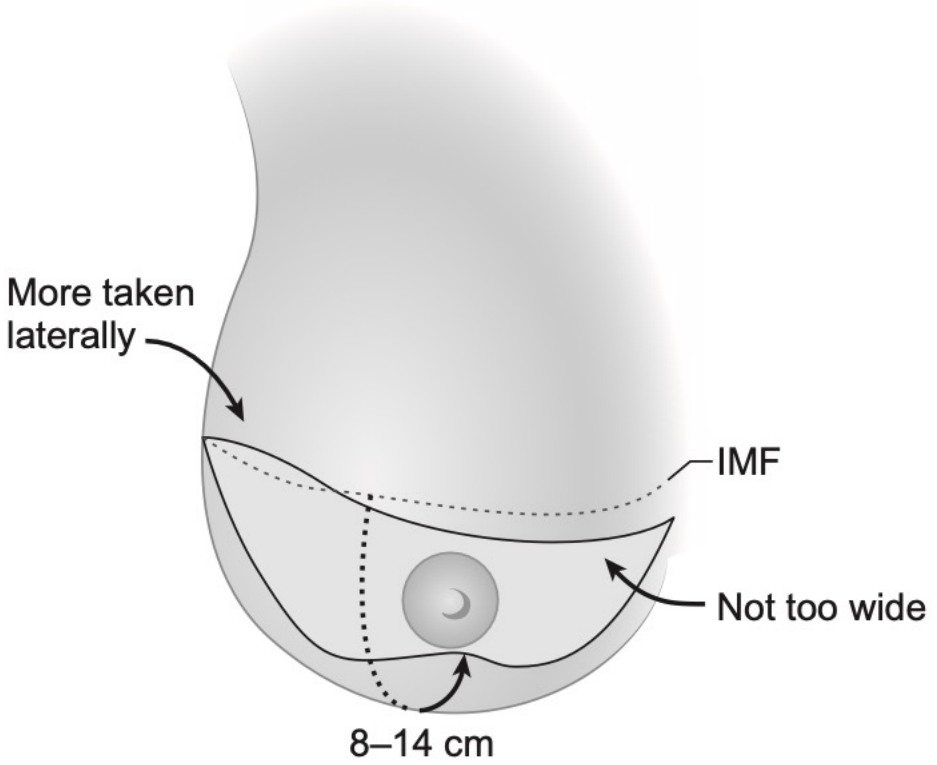




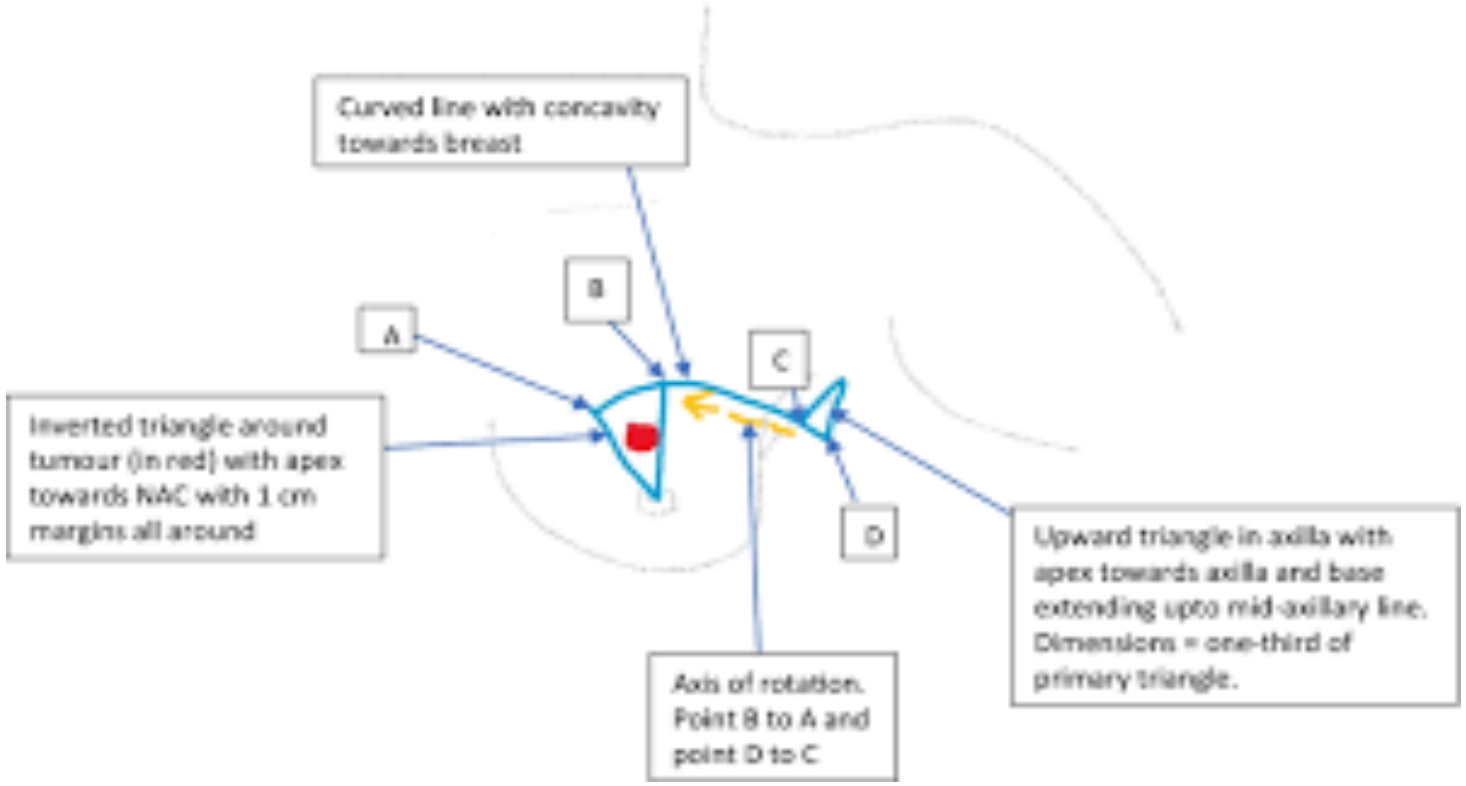
Lejour/vertical mammoplasty



Melon slice mammoplasty...



Burrows triangle



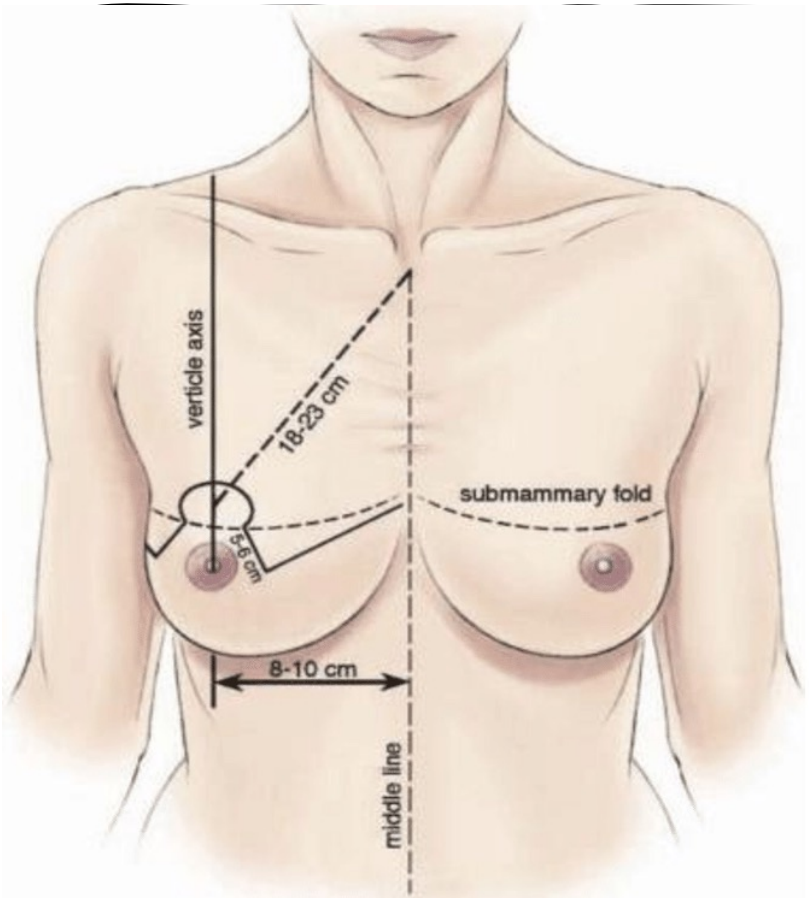
Therapeutic Mammoplasty...

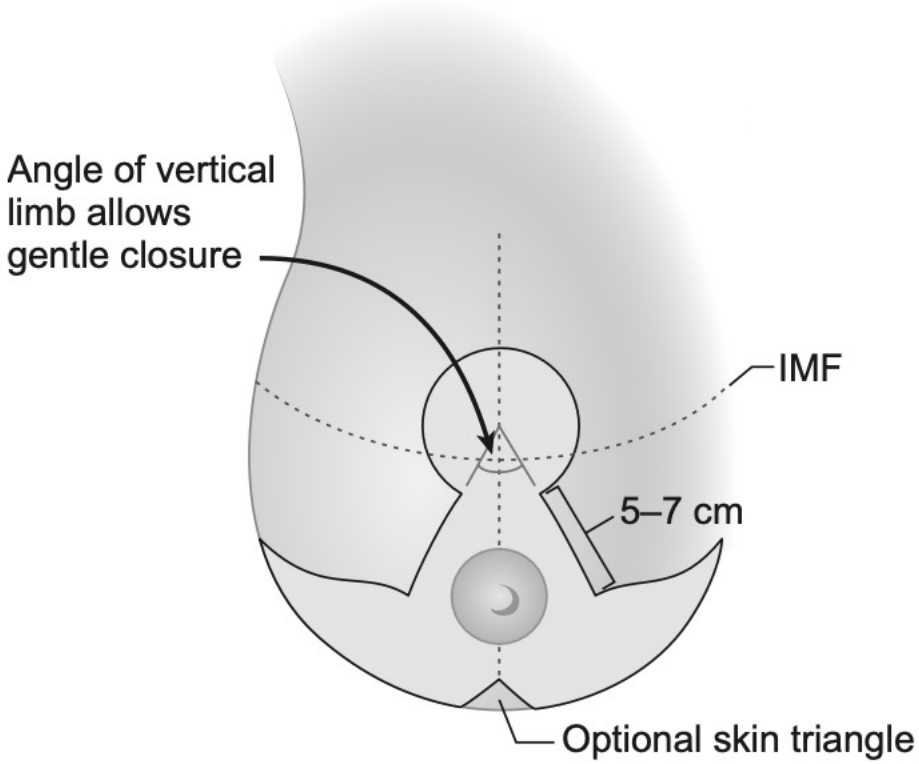
- Therapeutic mammaplasty is usefully subdivided into:

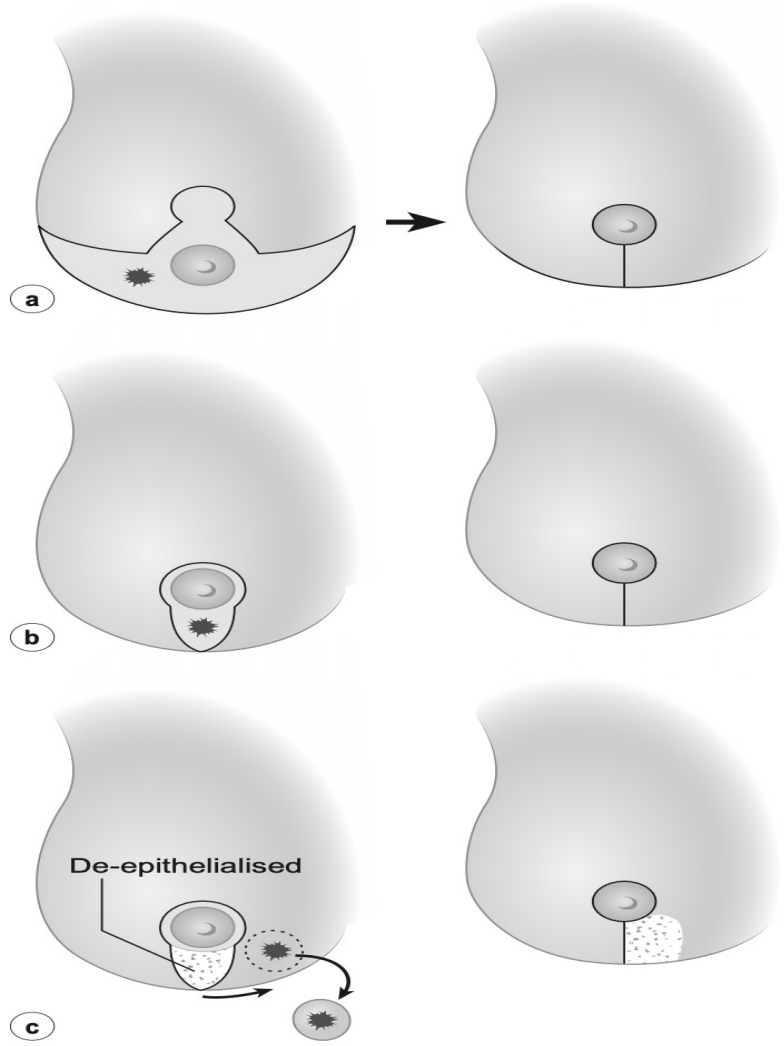
❖ Therapeutic reduction mammaplasty – where an overall breast reduction is planned in combination with a wide local excision (usually using a Wise pattern).

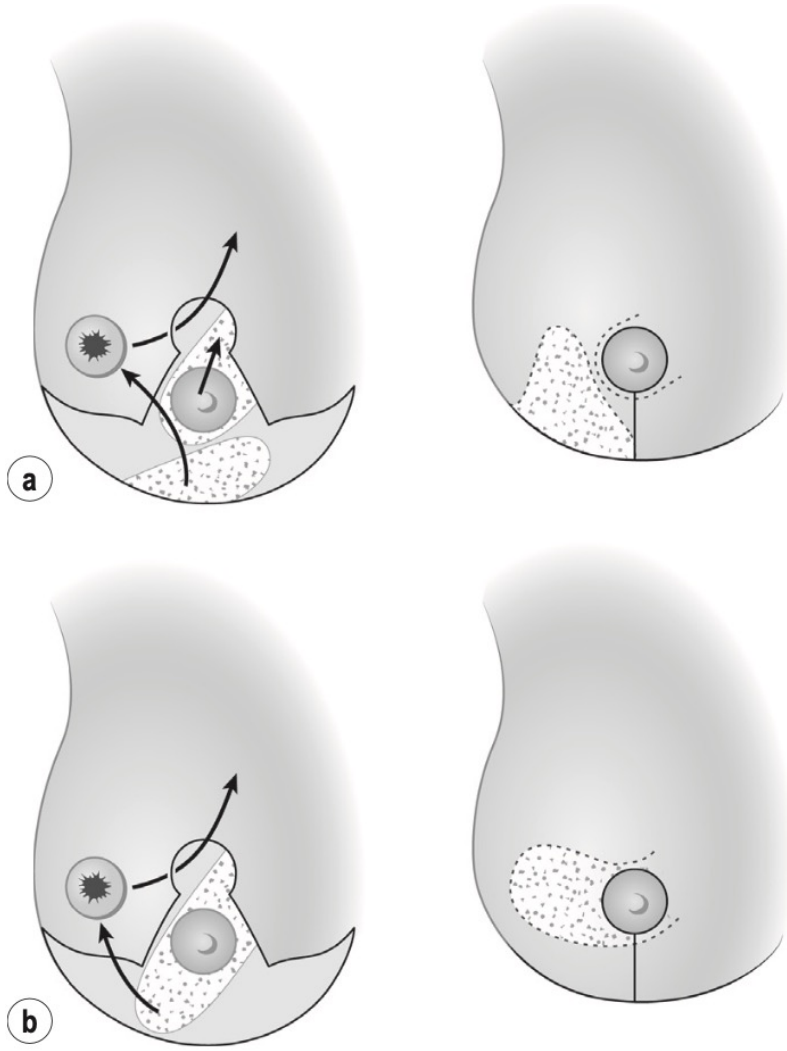
❖ Therapeutic mastopexy – where usually the only volume removed is the wide local excision itself (usually using a vertical pattern).

The wise pattern...






a
b
De-epithelialised
c


a
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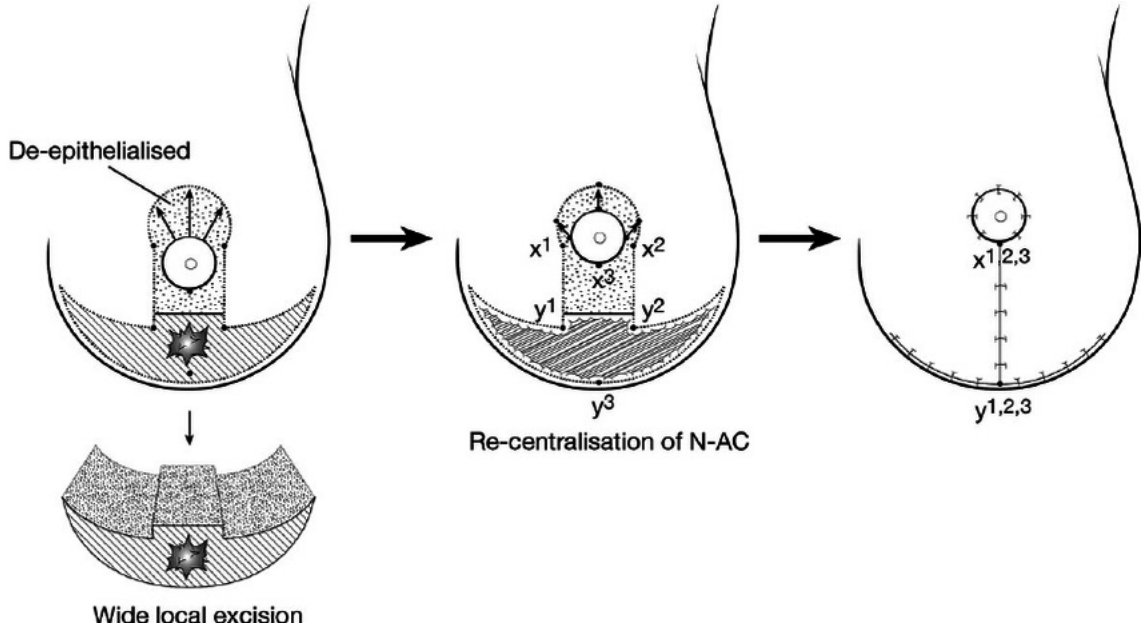
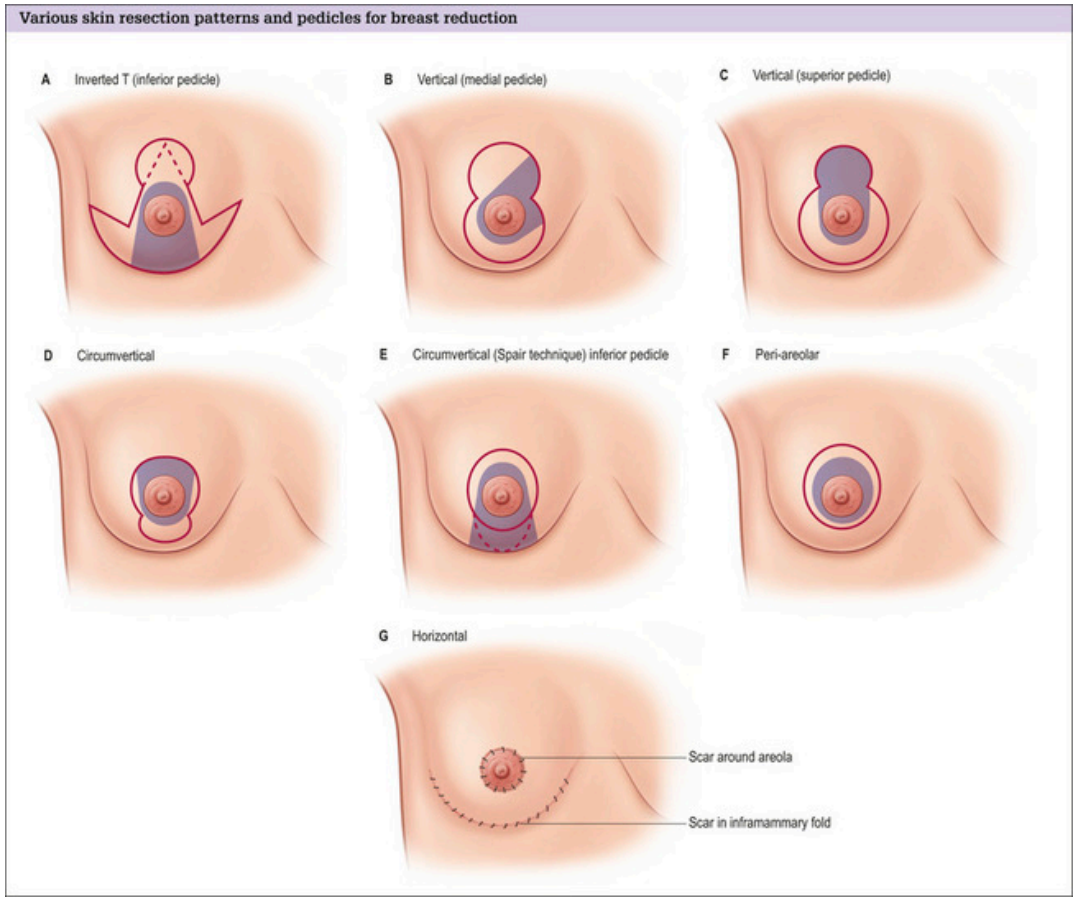

De-epithelialised
Wide local excision
x1
x2
x3
y1
y2
y3
Re-centralisation of N-AC
x1,2,3
y1,2,3


Various skin resection patterns and pedicles for breast reduction
A Inverted T (inferior pedicle)
B Vertical (medial pedicle)
C Vertical (superior pedicle)
D Circumvertical
E Circumvertical (Spair technique) inferior pedicle
F Peri-areolar
G Horizontal
Scar around areola
Scar in inframammary fold

Thank You.....