

BREAST RECONSTRUCTION

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Breast Reconstruction

The loss of a breast is psychologically traumatic for many women. Breast cancer can have a negative impact on a woman's body image and sexuality, as well as a clear asymmetry resulting in a difficulty in wearing clothes and keeping a good body balance.



Numerous studies have found reconstruction potentially offers psychosocial benefits for women, including:

- reduced psychological distress
- improved body image
- improved self-esteem
- feelings of well-being

BETTER QUALITY OF LIFE



Breast reconstruction

Breast cancer reconstructive surgery is a complex process of decision-making involving the patient, the breast surgeon, and the plastic surgeon. In the end, it is the **patient's choice** how she should proceed.

The patient should be well educated about **all** the **available options** as well as the **complications and benefits**.



BREAST RECONSTRUCTION: INDICATIONS

Ideally, all women should be offered the option to an immediate or delayed reconstruction based on her clinical situation.

RELATIVE CONTRAINDICATIONS

- Co-morbidities
- Smoker
- Elderly patients with bad quality of life

TYPES OF BREAST RECONSTRUCTION



TIMING

TYPES OF BREAST RECONSTRUCTION



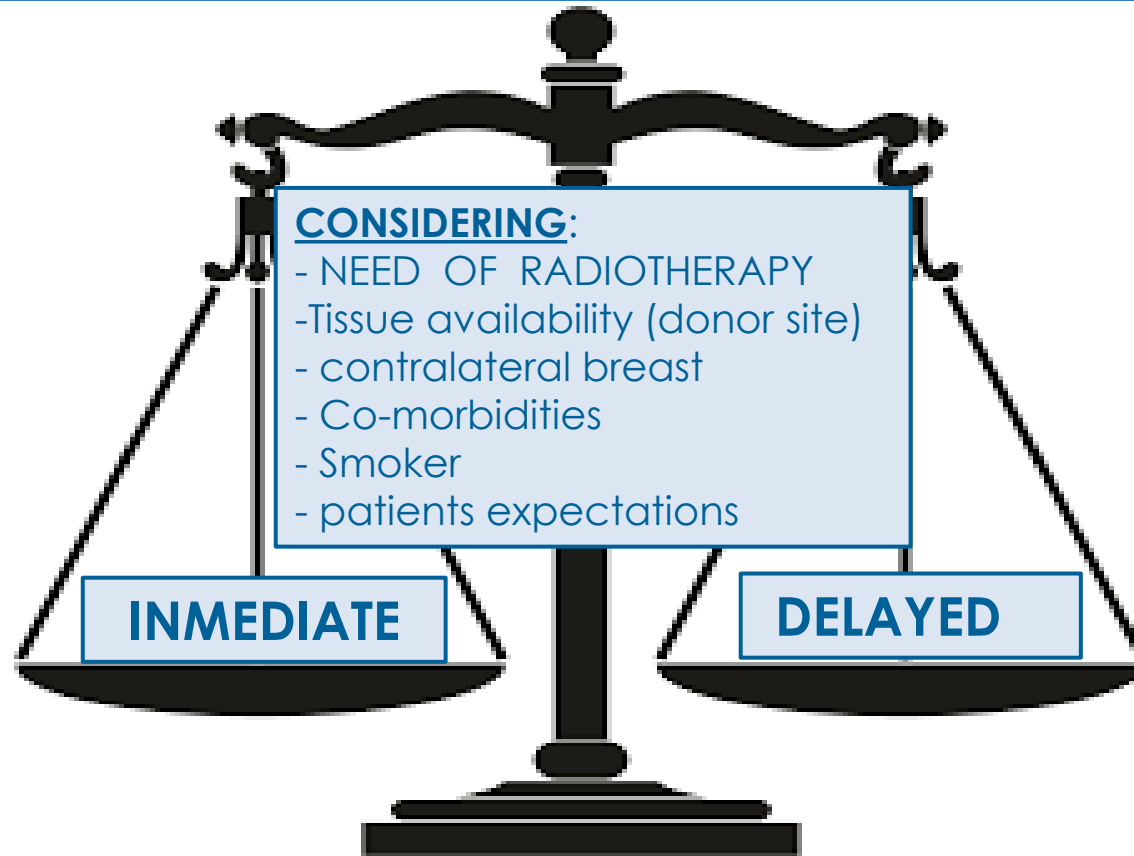
TIMING

IMPACT OF RADIOTHERAPY (PRE OR POST)

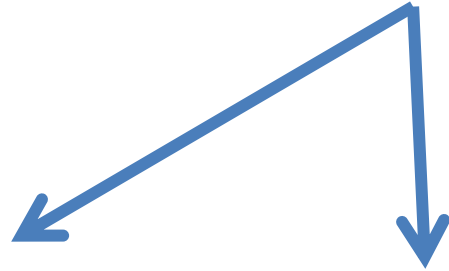
- The complication rate is x 2-10 (depending of the series) in implant based reconstruction, in the short term and in the long term.
- The result, even if no complications, is usually harder and tighter.
- In flaps it causes fat necrosis, shrinking and may affect the skin.

It's one of the most important factor to decide the timing and type of reconstruction, avoiding only implants ideally.

Breast reconstruction



TYPES OF BREAST RECONSTRUCTION



IMMEDIATE
DELAYED

TECHNIQUE

TYPES OF BREAST RECONSTRUCTION



TYPES OF RECONSTRUCTION

AUTOLOGOUS

- It's your own tissue, no external materials
- Once healed, it's there forever. Doesn't need follow up
- It changes with the patient as she gains or loses weight
- It's a more complex and longer surgery
- Needs donor sites
- Leaves new scars in the donor sites
- They usually look more natural and softer

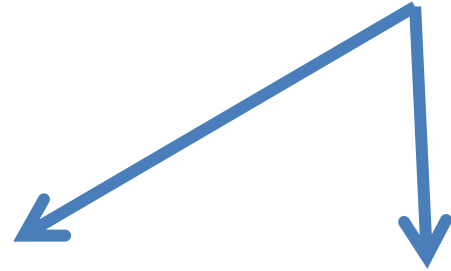
IMPLANT BASED

- We are using an external device
- There can be complications in the short term, but also in the long term
- There's follow up for ever
- Implants don't have an expiry date. But above 10-15 years the risk of complications is higher
- Patients will need more surgery over time
- They usually look harder and less natural

IMPLICATIONS OF USING IMPLANTS

- They need surveillance for ever. If rupture is suspected, US or MRI is needed
- They have potential complications in the short-long term:
 - Infection
 - Rupture
 - Capsular contracture
 - Pain
 - Rotation/Implant malposition
 - Skin problems
 - BIA-ALCL: typical presentation, sudden late seroma. Or mass.

TYPES OF BREAST RECONSTRUCTION



AUTOLOGOUS

- DIEP
- Other Free flaps
- LD + Fat Graft

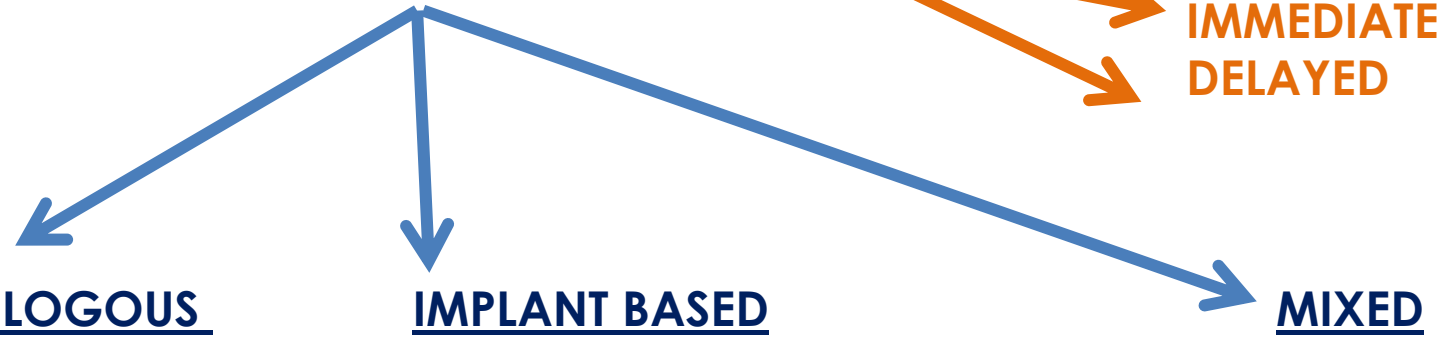
IMPLANT BASED

- 1 stage: DIRECT IMPLANTS
+/- ADM
- 2 stages: EXPANDER FIRST +
IMPLANT EXCHANGE (later)



IMMEDIATE
DELAYED

TYPES OF BREAST RECONSTRUCTION



AUTOLOGOUS

- DIEP
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IMPLANT BASED

- 1 stage: DIRECT IMPLANTS
+/- ADM
- 2 stages: EXPANDER FIRST +
IMPLANT EXCHANGE (later)

MIXED

LD + IMPLANT

Breast reconstruction



THINGS TO CONSIDER:

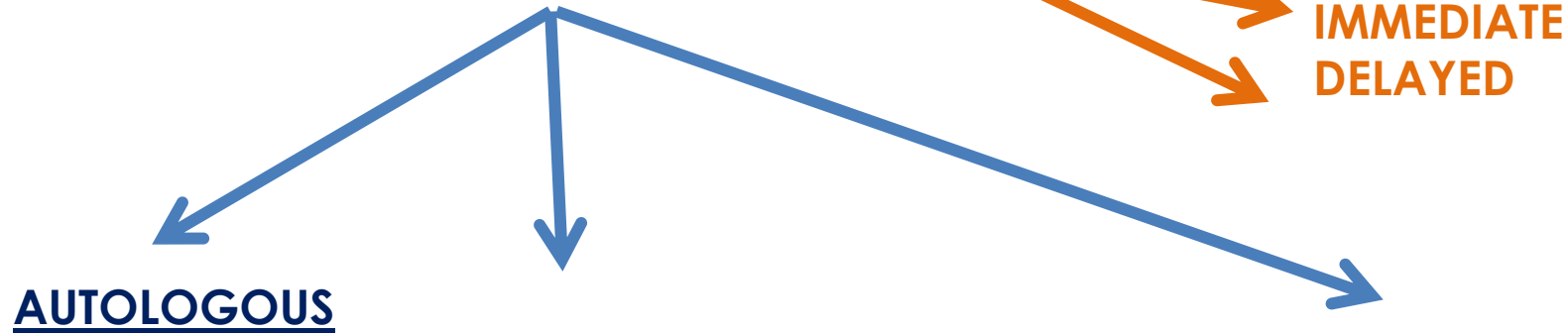
- RADIOTHERAPY (PRE/POST)
 - Breast size/Width
- Tissue availability (donor site)
 - CONTRALATERAL BREAST
 - Co-morbidities
- Implications of using implants
 - Scars
- PATIENTS EXPECTATIONS/DESIRES**

AUTOLOGOUS

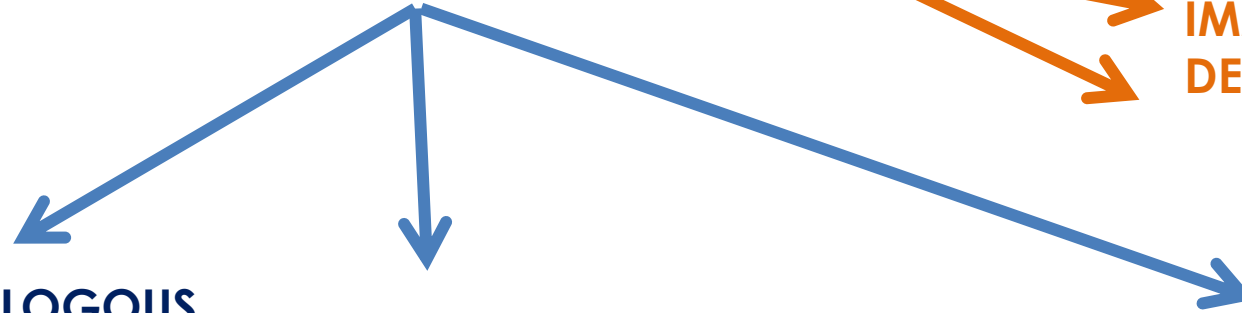
IMPLANTS

MIXED

TYPES OF BREAST RECONSTRUCTION



TYPES OF BREAST RECONSTRUCTION

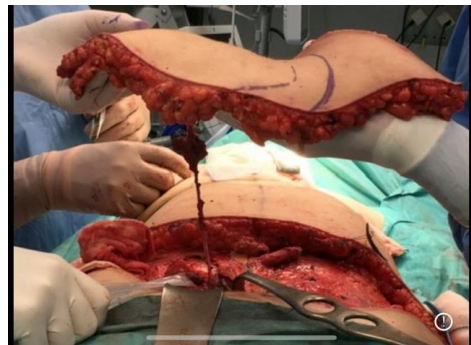
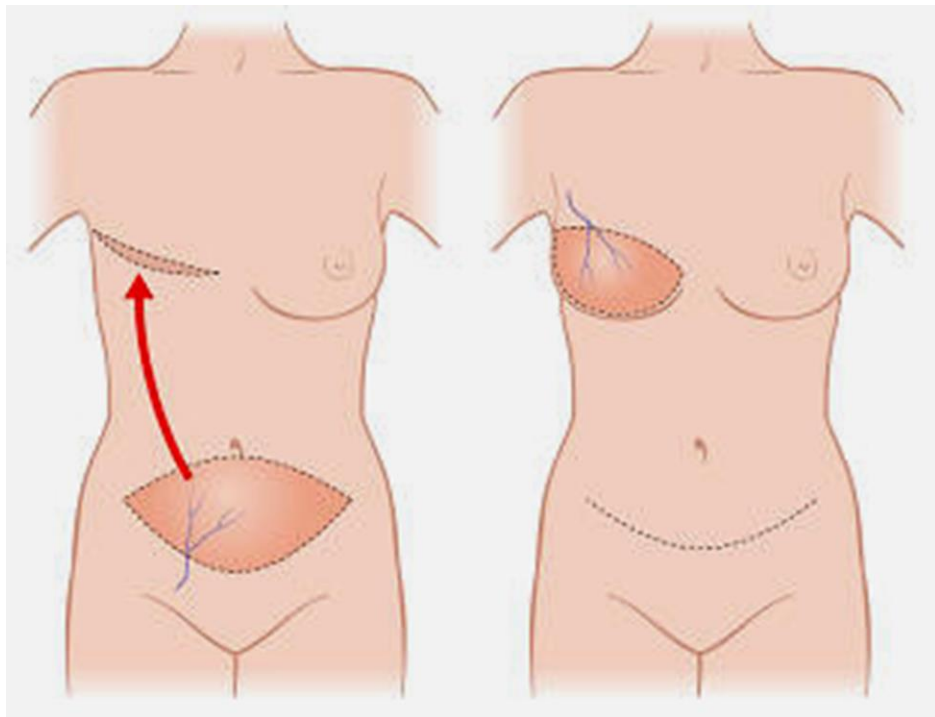


AUTOLOGOUS

-DIEP

IMMEDIATE
DELAYED

Breast reconstruction



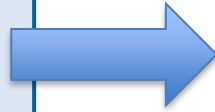
**DIEP: DEEP INFERIOR EPIGASTRIC
PERFORATOR FLAP**

Free flap

Breast reconstruction

CLINICAL CASE:

- Medium Age (40s). Non smoker. No conditions
- Unilateral (right) Breast cancer. For right mastectomy
- Breast medium Size. Ptotic
- Good adiposity in the abdomen
- No radiotherapy needed
- Desires to avoid implants



**IMMEDIATE Right
DIEP
+ Left Mastopexy**

CLINICAL CASE:

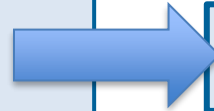
- Medium Age (50s). Non smoker. No conditions
- Unilateral (right) Breast cancer, for mastectomy
- Large Breast . Ptotic
- Good adiposity in the abdomen
- No radiotherapy needed
- Desires to avoid implants. Doesn't want surgery in the CL breast.



**IMMEDIATE Right
DIEP**

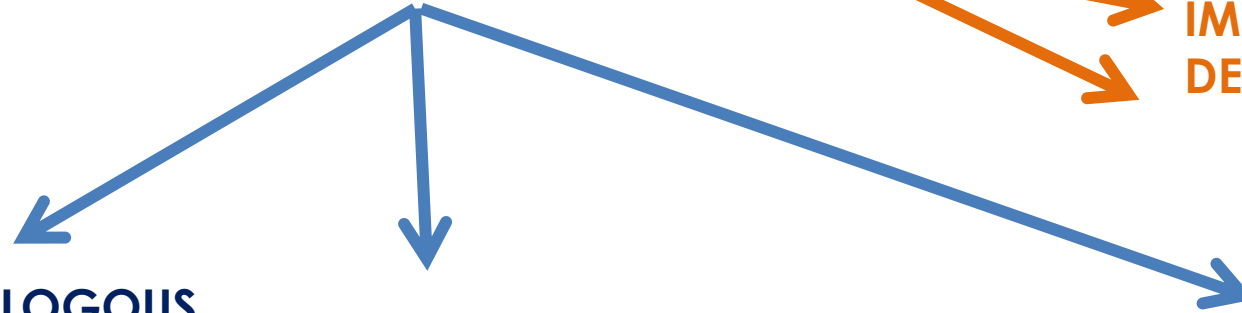
CLINICAL CASE:

- Medium Age (40s). Non smoker. No conditions
- Previous left Mastectomy + **RT**
- Breast medium Size. No Ptosis
- Good adiposity in the abdomen
- Good size and shape in the right, prefers to avoid scars (surgery) in the right.



DELAYED Left DIEP

TYPES OF BREAST RECONSTRUCTION

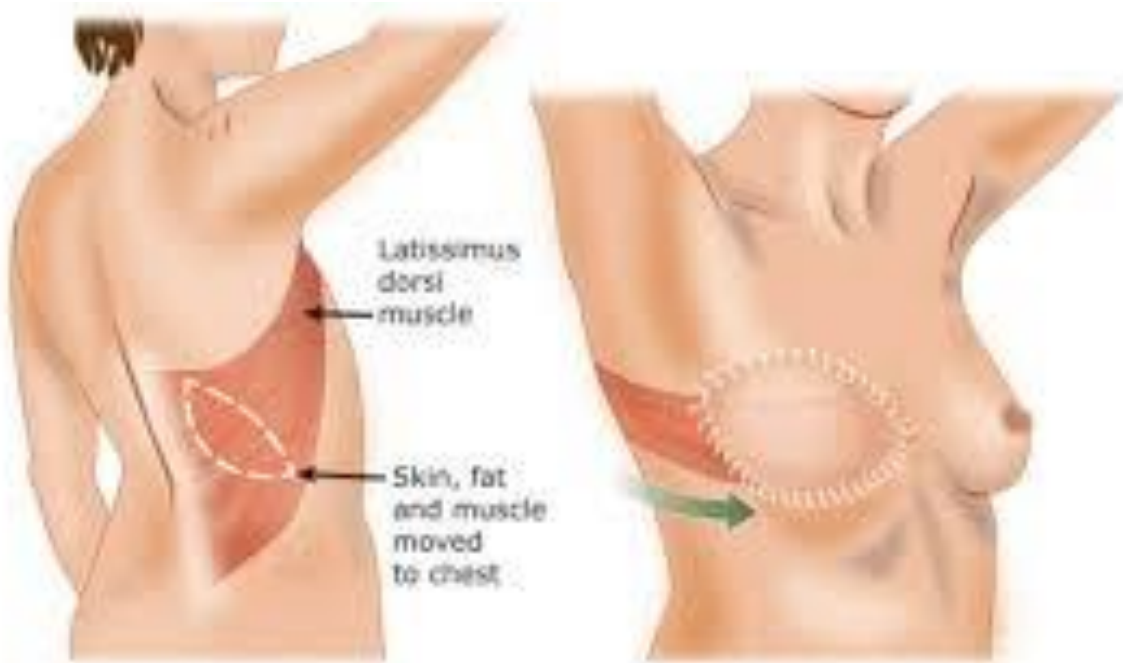


AUTOLOGOUS

-LD + Fat Graft

IMMEDIATE
DELAYED

LD (LATTISIMUS DORSI) AND FAT GRAFT



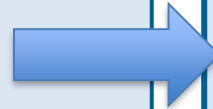
LD: Pedicled flap (vessels in the axilla, transposed)

FAT GRAFTING



CLINICAL CASE:

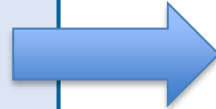
- Young(30s). Non smoker. No conditions
- Unilateral Breast cancer in BRCA patient
- Previous bilateral mastectomies
- No radiotherapy
- Limited abdominal adiposity for bilateral DIEP. Runs marathons. Wants to avoid implants.



**DELAYED Bilateral
LD AND FAT GRAFT
(1ST STAGE)**

CLINICAL CASE:

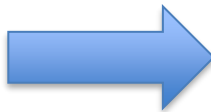
- Young (30s). Non smoker. No medical conditions. High risk (No BRCA)
- Bilateral Breast cancer (Left had WLE and RT in the past). For bilateral mastectomies
- Large breast, with important ptosis
- Desires similar or smaller volumen. Small adiposity in abdomen, ok for one breast, small for two.



**IMMEDIATE
Bilateral
LD AND FAT
GRAFT (1ST
STAGE)**

CLINICAL CASE:

- Young(30s). Non smoker. No conditions
- Bilateral Breast cancer. Left previous RT, reconstructed with DIEP.
- Failed implant in the right side.
- Desires autologous reconstruction in the right side (to match and avoid implants). Abdomen no longer available.

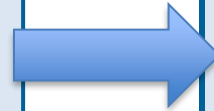


**DELAYED Right
LD AND FAT
GRAFT**

Breast reconstruction

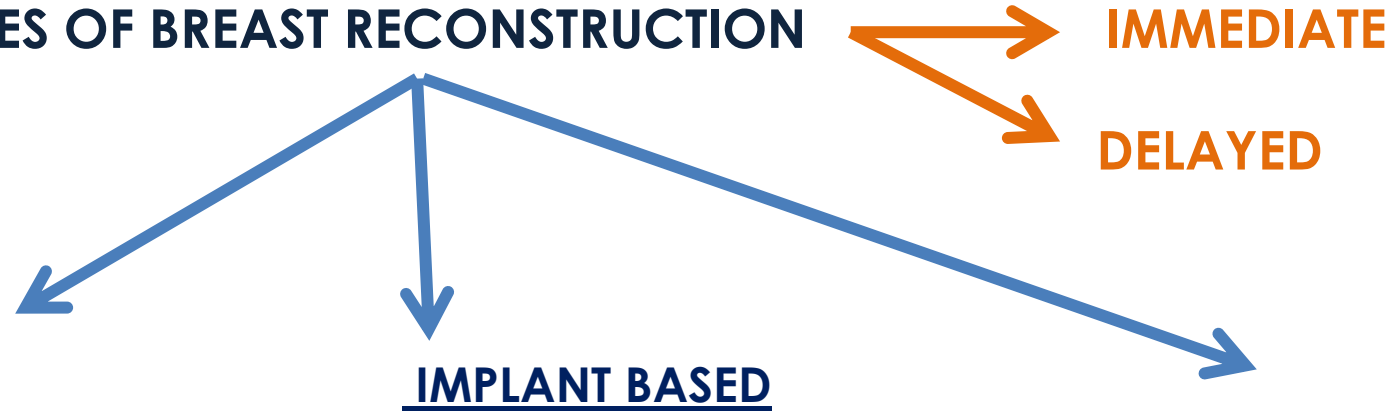
CLINICAL CASE:

- Medium age (50s). Non smoker. No conditions
- Current right breast cancer, for mastectomy
- Previous left breast cancer reconstructed with delayed DIEP
- No radiotherapy needed
- Desires also autologous reconstruction (avoiding implants). NO DIEP available (already used)



**IMMEDIATE LD
AND FAT GRAFT
(1ST STAGE)**

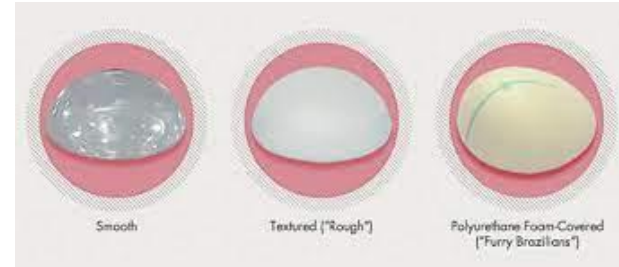
TYPES OF BREAST RECONSTRUCTION



Breast reconstruction

SHAPES

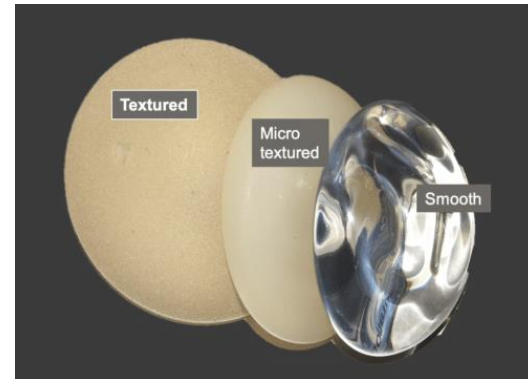
BREAST IMPLANT SHAPES



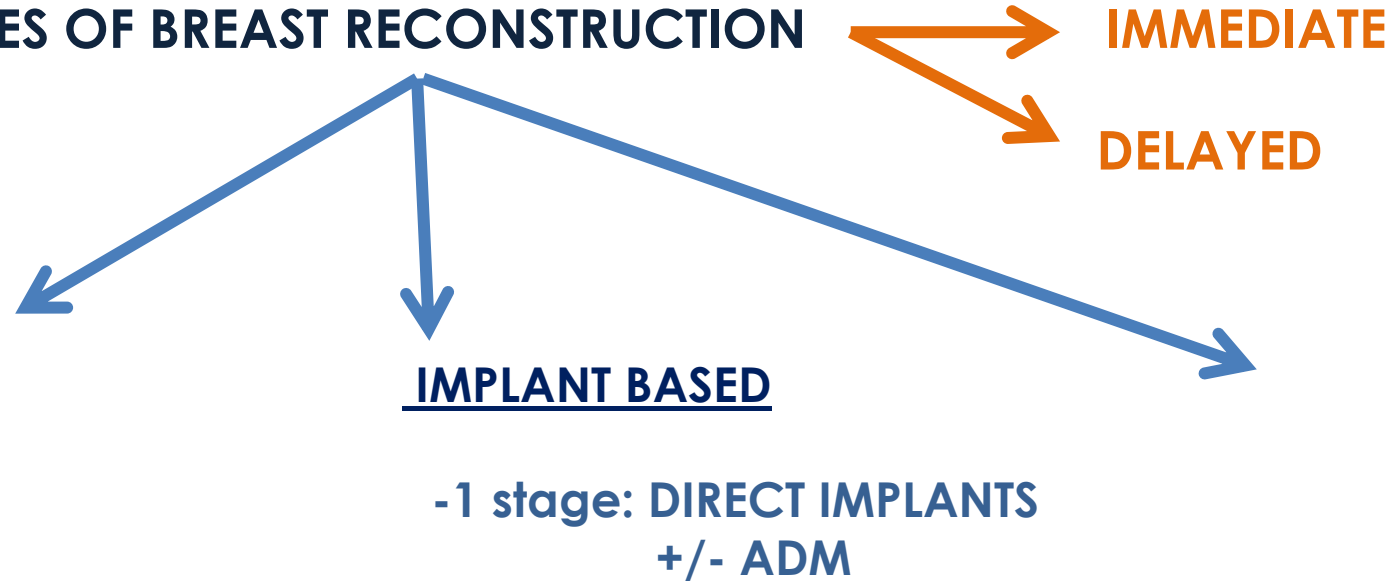
TEXTURES



FILLING



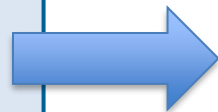
TYPES OF BREAST RECONSTRUCTION



Breast reconstruction

CLINICAL CASE:

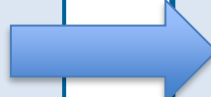
- Young(20s). Non smoker. No conditions
- Unilateral Breast cancer in BRCA Patient, for bilateral mastectomies
- Medium breast Size. No ptosis
- No radiotherapy needed
- Desires similar volumen. No adiposity for bilateral autologous reconstruction



**Bilateral
IMMEDIATE
DIRECT IMPLANTS**

CLINICAL CASE:

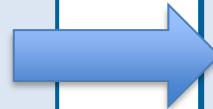
- Young(20s). Non smoker. No medical conditions
- Unilateral Breast cancer in BRCA patient
- Small Size. No ptosis. Good shape
- No radiotherapy needed
- Desires similar volumen. No adiposity for bilateral autologous reconstruction



**Bilateral IMMEDIATE
DIRECT IMPLANTS
(SUBMUSCULAR)**

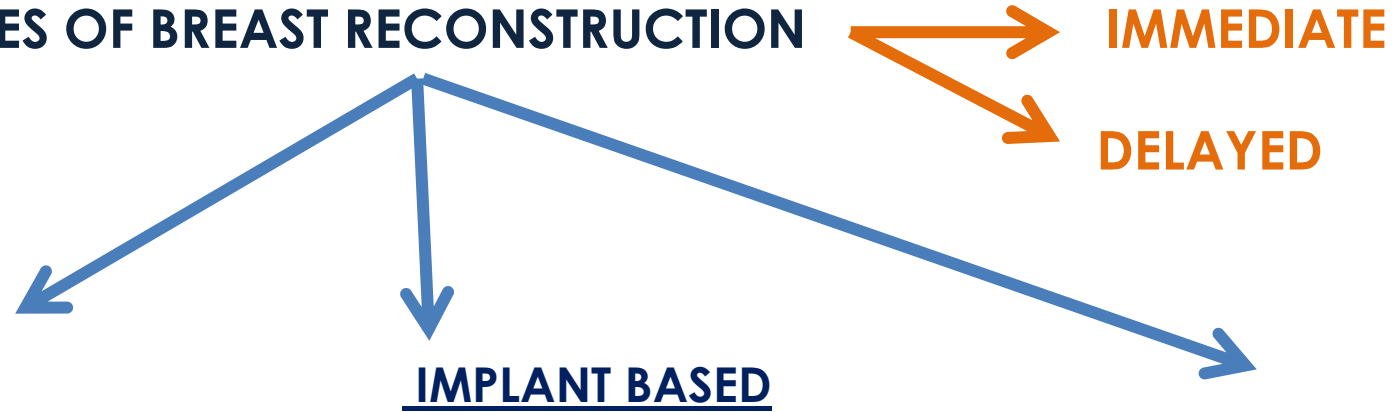
CLINICAL CASE:

- Medium age (40s). Non smoker. Bleeding disorder.
- Unilateral Breast (right) cancer, for mastectomy
- Medium Size. Medium ptosis.
- No radiotherapy needed
- Desires similar volumen. Doesn't want to symmetrize (risk of bleeding)



**Right IMMEDIATE
DIRECT IMPLANT
(PREPECTORAL)**

TYPES OF BREAST RECONSTRUCTION



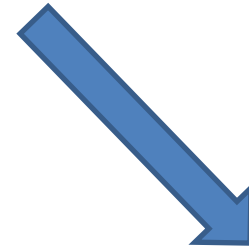
- 2 stages: EXPANDER FIRST +
IMPLANT EXCHANGE (later)

Breast reconstruction

EXPANDERS



**What technique to use
in the contralateral breast?**



Augmentation

Breast reconstruction

CLINICAL CASE:

- Young(30s). Non smoker. No medical conditions
- Unilateral (right) Breast cancer, for mastectomy
- Breast small Size.
Minimum ptosis
- No radiotherapy needed
- Desires implant in the contralateral breast

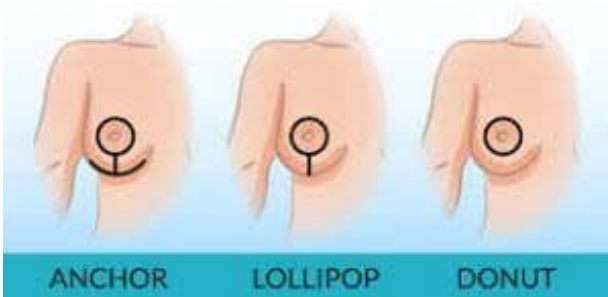
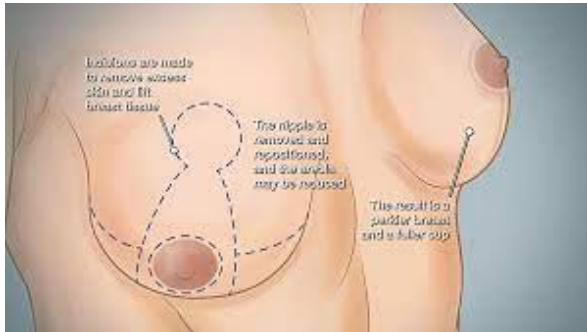


**IMPLANT
reconstruction IN 2
STAGES**

**1st) Immediate right
expander**

**2nd) Expander
exchange
+ left augmentation**

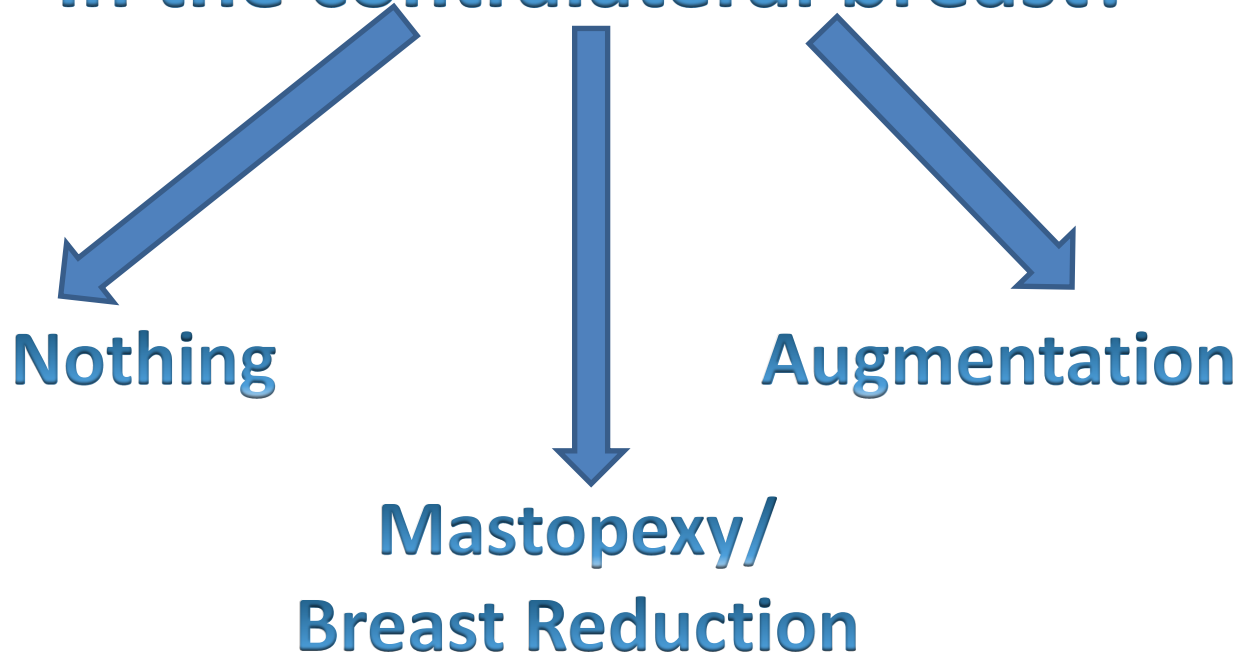
What technique to use in the contralateral breast?



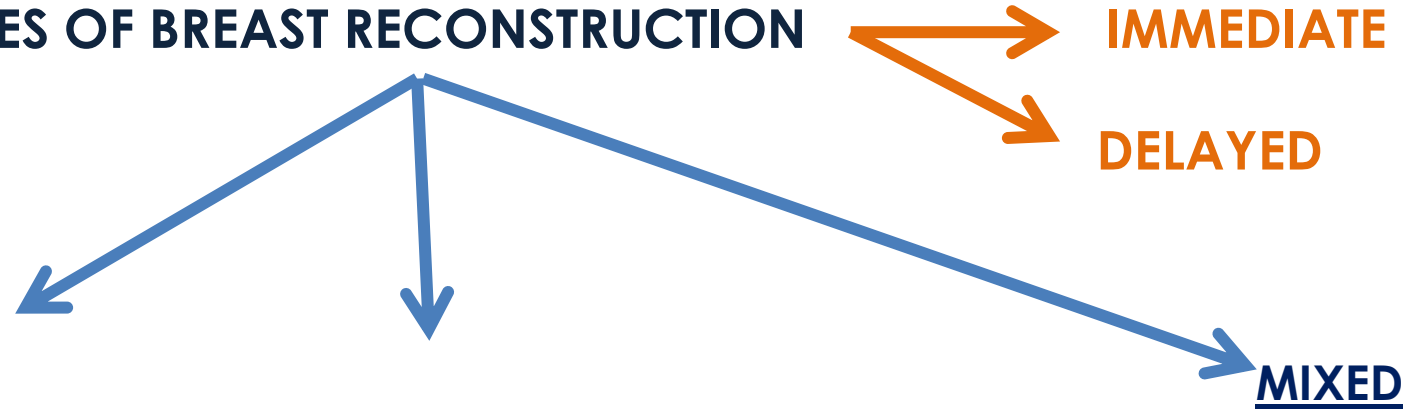
Augmentation

**Mastopexy/
Breast Reduction**

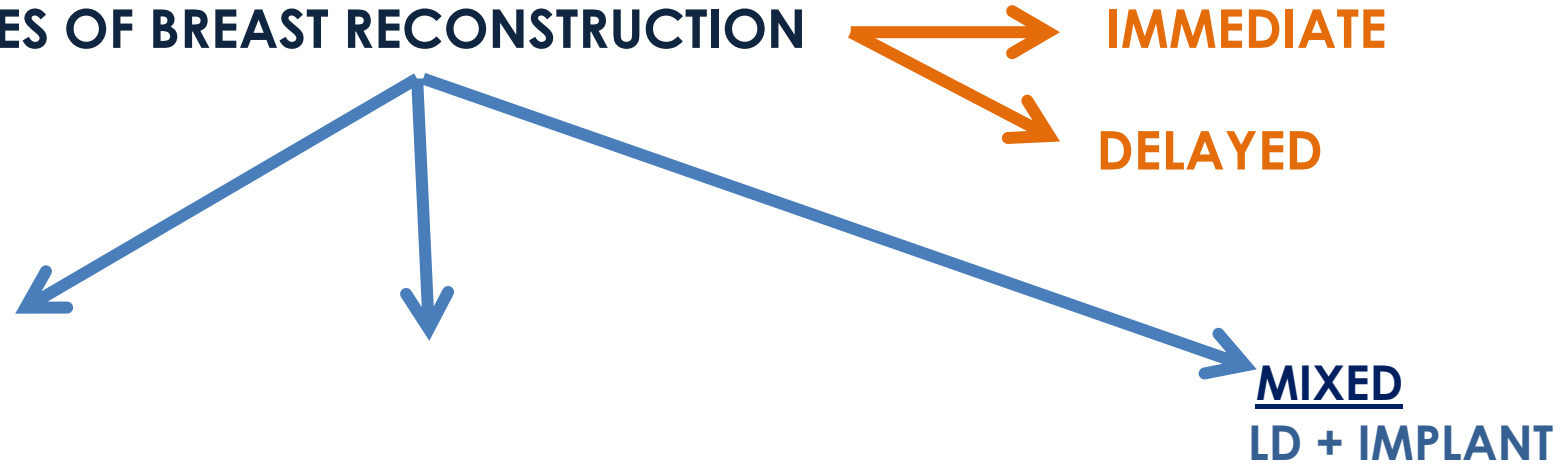
What technique to use in the contralateral breast?



TYPES OF BREAST RECONSTRUCTION



TYPES OF BREAST RECONSTRUCTION



WHEN? EXAMPLES:

- Patients with previous RT that would desire implant based reconstruction
- Patients with previous RT that desire an implant in the contralateral breast
- Patients with previous RT that want a large volumen but have small adiposity for DIEPS



**BILATERAL or UNILATERAL
LD AND IMPLANT**

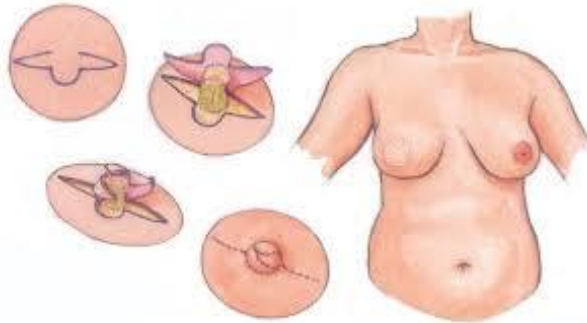
CLINICAL CASE:

- Medium age(50s). Non smoker. No conditions
- Previous left Breast cancer reconstructed with LD and implant
- Important weight los. Previous LD dropped
- Posterior right breast cancer and mastectomy



**PEXY of the previous LD
and IMPLANT EXCHANGE
and RIGHT DELAYED LD
AND IMPLANT
(SECONDARY CASE)**

NIPPLE RECONSTRUCTION



NIPPLE RECONSTRUCTION



SEQUELAE POST WLE AND RT



CONCLUSIONS

- * The potential benefits of breast reconstruction are well documented and include improved body image, self-esteem, sexuality, well-being.
- * Breast reconstruction is a complex process that sometimes involves long and/or several surgeries and potential complications.
- * There are many different options and techniques to offer.
- * The patient should be well informed about ALL available options as well as the complications and benefits. In the end, it is the patient's choice how she should proceed.
- Ideally ALL patients who face a mastectomy should be at least considered for breast reconstructive surgery.

Thank you