# BREAST RECONSTRUCTION

## The Options

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## TOPICS

- Immediate or delayed reconstruction
- Skin replacement by expansion or flaps
  - Acellular dermal matrix
- Volume replacement by implants or flaps
- Importance of radiotherapy
- Problems

## **IMMEDIATE OR DELAYED**

# Immediate: skin preservation possible

- **Delayed**: skin **replacement** *required*:
  - Expansion
  - Flap

## **IMMEDIATE OR DELAYED**

#### 

- Extensive DCIS
- Multifocal lesions
- Lesion involving nipple
- Local recurrence

#### 

- Radiotherapy (~ same indications as mastectomy)
  - Tumour >5 cm
  - SLN involvement (SLNB part of workup)
  - Skin/muscle involvement

## IMMEDIATE

#### SKIN PRESERVATION

- Volume replacement with:
- Implant and ADM
- Myo-subcutaneous flap +/- implant
- > NO SKIN PRESERVATION (smoker/DXT)
  - Volume and skin replacement
    - Tissue expansion (bilateral)
    - Myocutaneous flap +/- implant

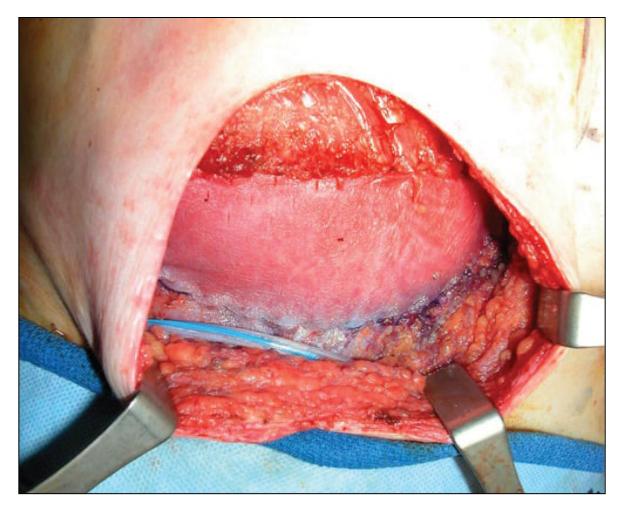
## **ACELLULAR DERMAL MATRIX**

# Alloderm – allograft human dermis Strattice – porcine dermis Surgimend – fetal bovine dermis

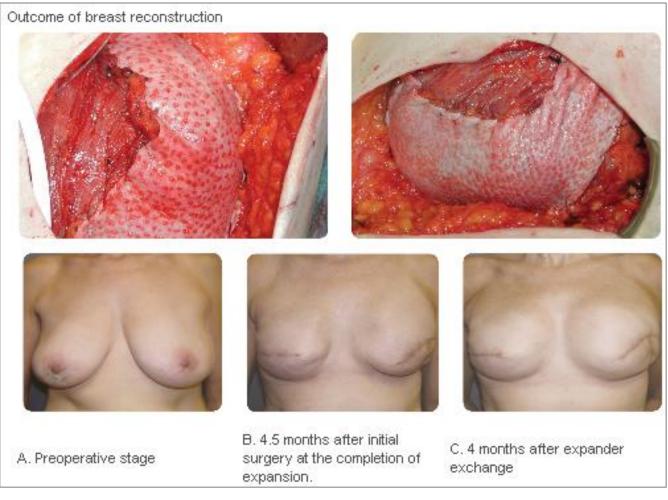
# FBADM

- Acellular biologic matrix derived from fetal bovine dermis, a rich source of Type III collagen.
- Type III collagen mediates tissue healing and growth while inhibiting scarring.
- > No detrimental foreign body inflammatory response
- Provides support for rapid healing without inflammation.
- Seeded with the patient's tissue building cells and growth factors.
- Microporous matrix rapidly revascularized to support tissue building and healing.

#### **IMPLANT AND FBADM (SurgiMend<sup>™</sup>)**

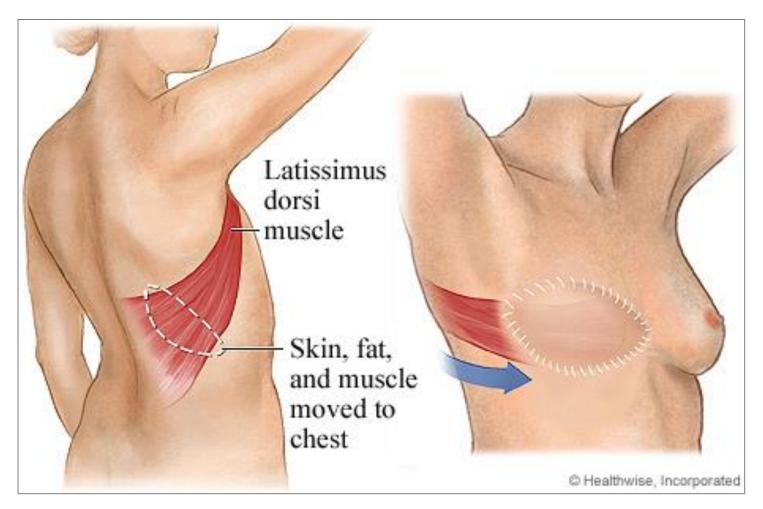


## IMPLANT AND PADM (Strattice<sup>TM</sup>)

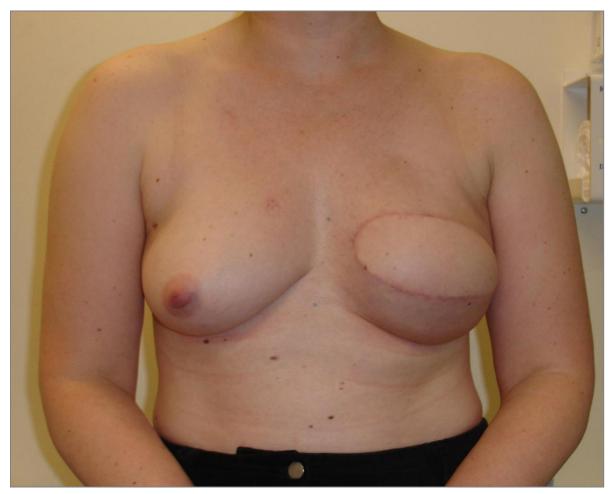


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## **PEDICLED LD FLAP**







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#### **TISSUE EXPANDER**





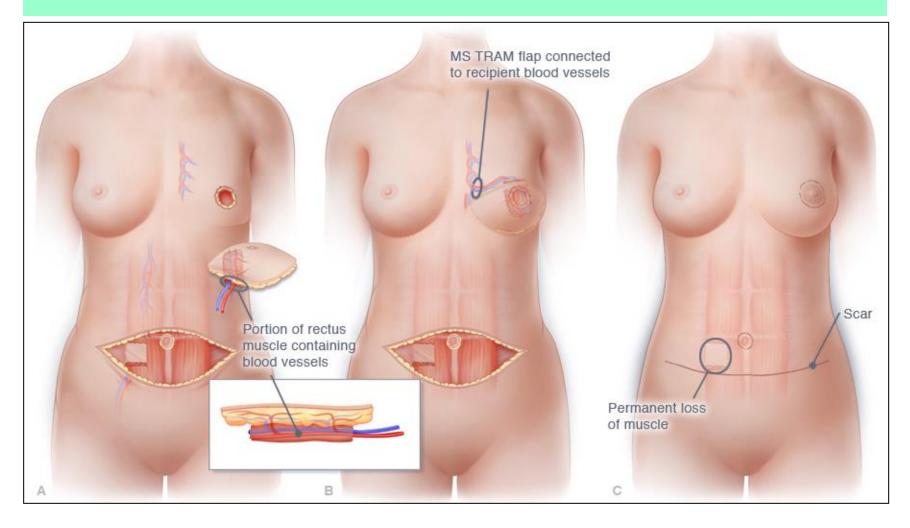
#### PEDICLED FLAPS

– LD +/- implant

#### • FREE FLAPS

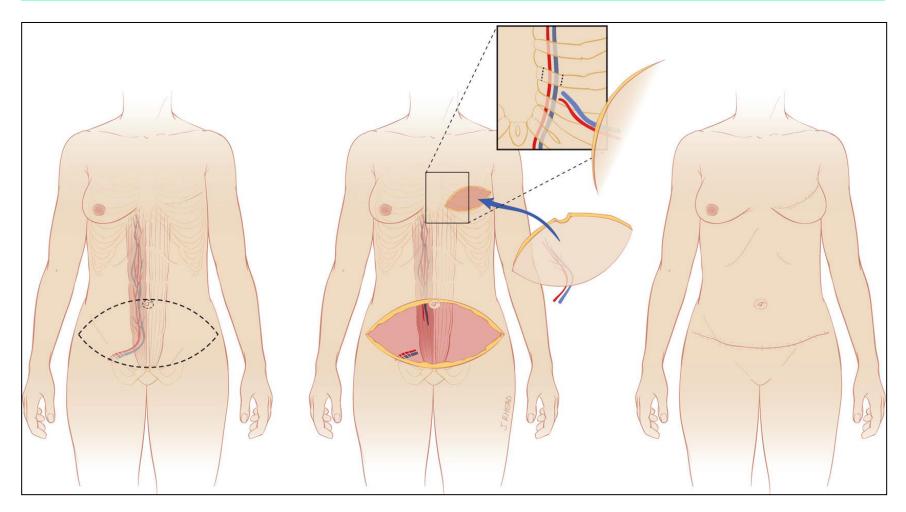
- TRAM-DIEP
- Gluteal
- others

### **FREE TRAM FLAP**



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### **FREE TRAM-DIEP FLAP**





#### Flap failure

#### Donor site problems

#### Implant problems: immediate/delayed

#### **QUESTIONS PLEASE**

## **SUMMARY**

- Immediate or delayed reconstruction depends on need for post mastectomy radiotherapy.
- Skin-preservation is possible in immediate reconstruction.
- Volume replacement using implants and ADM or flaps.
- Skin replacement by expansion or flaps.
- > No technique is free from problems.

