

The Role of Reconstructive Surgery Following Risk- Reducing Mastectomy

Yoav Barnea, MD

*Head, Plastic & Reconstructive Breast Surgery Service
Plastic Surgery Department
Tel-Aviv Medical Center, Israel*



Principles in Breast Reconstruction

- Breast 3 dimensions
- Goal of reconstruction
 - Symmetric
 - Permanent
 - Natural
- Technique
 - Safe and reliable
 - Predictable outcome
 - Suitable for various body habitus
 - Minimal donor morbidity



Immediate Breast Reconstruction

- One-stage operation
 - Available skin envelope
 - Better cosmetic result
 - Psychosocial advantage
 - Oncologically safe
- Cancer incidence in a cohort of Ontario and Quebec women having bilateral breast augmentation.¹
 - Skin-sparing mastectomy and immediate reconstruction is an acceptable treatment option for patients with high-risk breast carcinoma.²
 - Recurrent breast cancer following immediate reconstruction with myocutaneous flaps.³

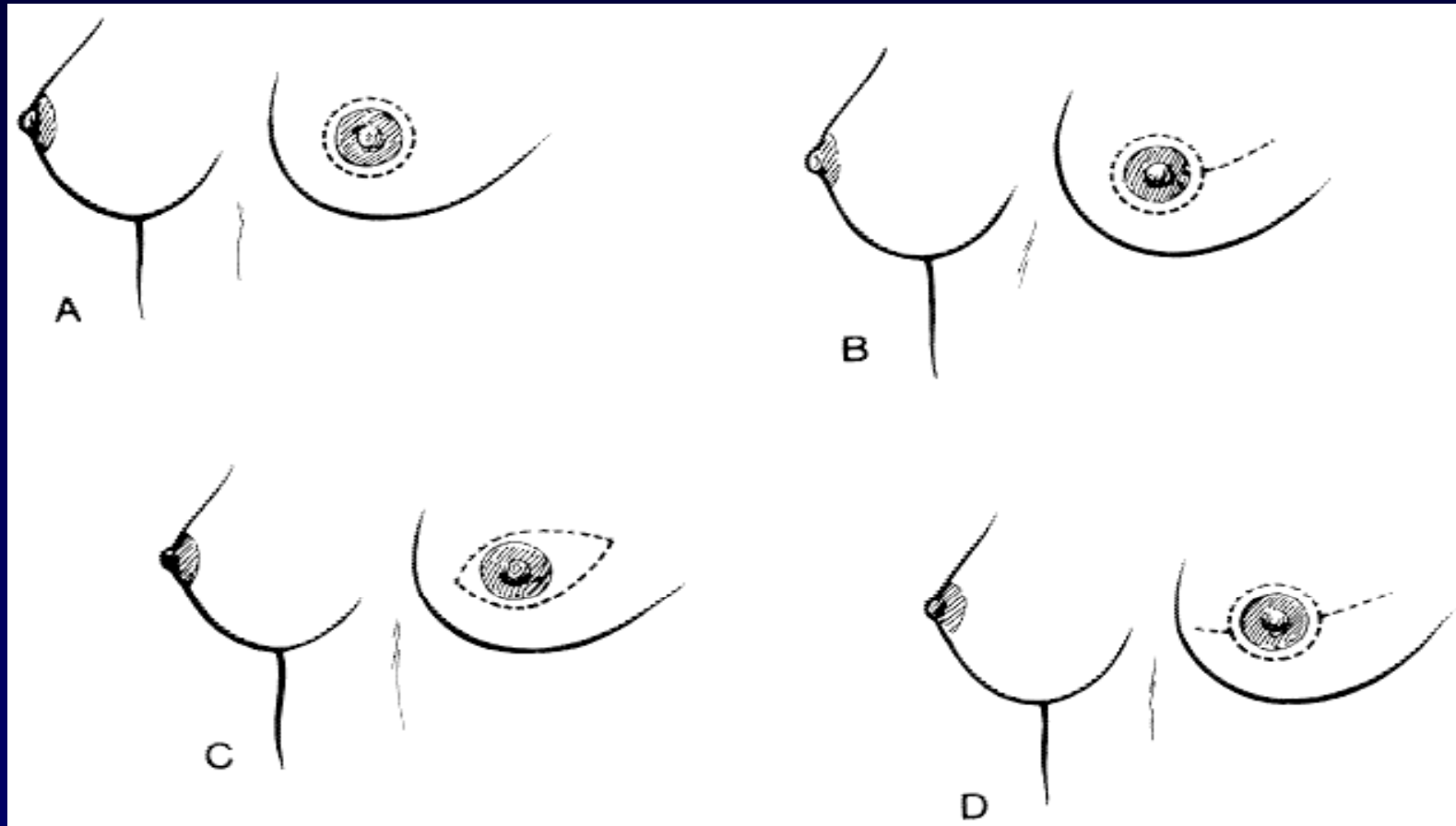
1. Brisson J, et al. *Int J Cancer*. 2006;118(11):2854-2862. 2. Downes KJ, et al. *Cancer*. 103(5):906-913. 3. Slavin SA, et al. *Plastic Reconstr Surg*. 1994;93(6):1191-1207.

Risk-Reducing Mastectomy

- Healthy
- Young
- No co-morbidities
- No cancer
- No adjuvant therapy
- Elective surgery
- High expectations



Skin-Sparing Mastectomy



Breast Reconstruction Options

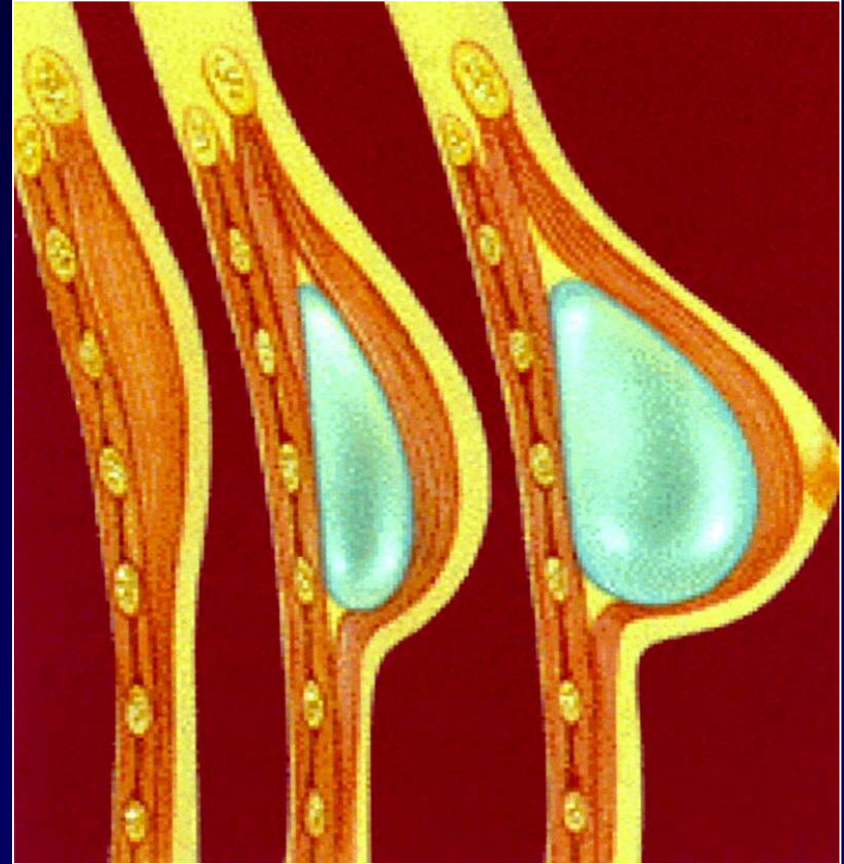
- Implant (Alloplastic)
 - Expander
 - Implant
- Body tissue (Autologous)
 - Abdomen
 - Gluteus
 - Thigh
- Body tissue and implant (Combined)
 - Latissimus



Implant-Based Reconstruction

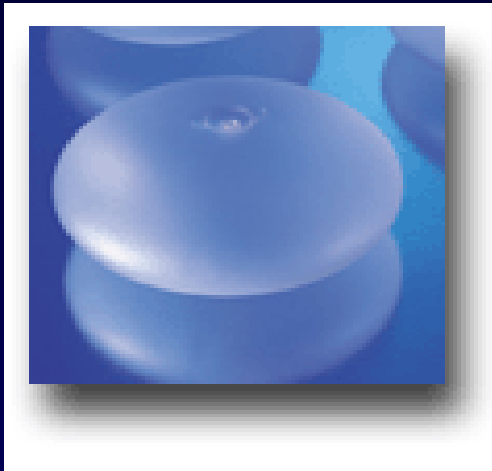
- Expander
 - Submuscular balloon
- Implant
 - Silicone
 - Saline
- Combined (dual chamber)
 - Outer silicone, inner saline
 - Valve





Types of Implants

- Content
 - Silicone
 - Saline



- Shape
 - Round
 - Anatomic



Acellular Dermal Matrix

➤ Alloderm



Figure # 8 a

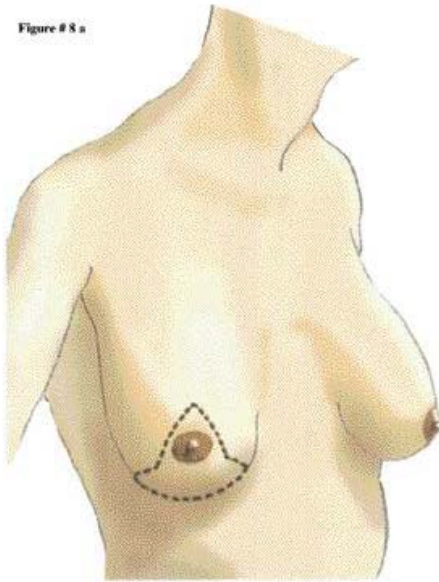


Figure # 8 b

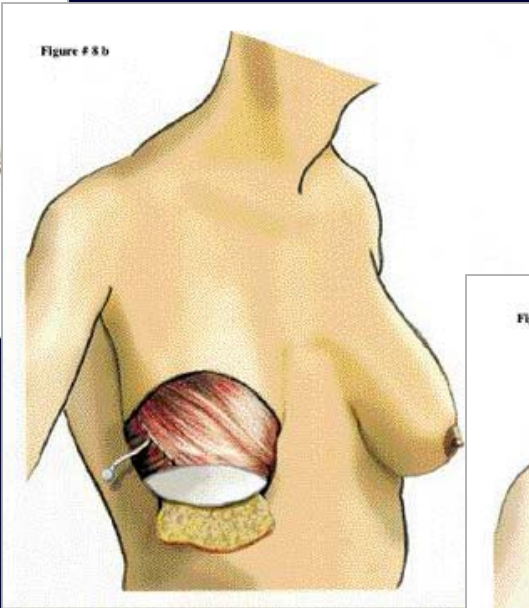


Figure # 8 c

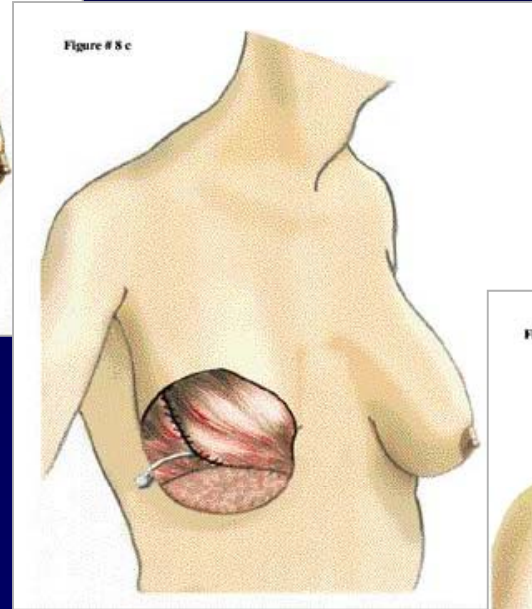
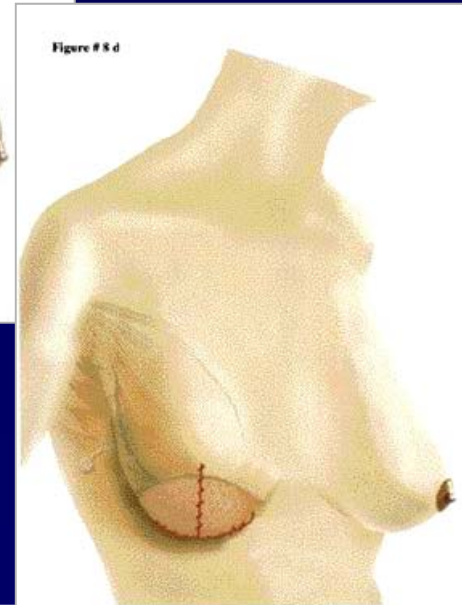


Figure # 8 d



Reduction Pattern

Implant-Based Reconstruction

➤ Pros

- Short surgery
- Quick recovery
- No donor site
- Reversible
- Exchangeable
- Safe
 - Cancer
 - Connective tissue diseases



Implant-Based Reconstruction

➤ Cons

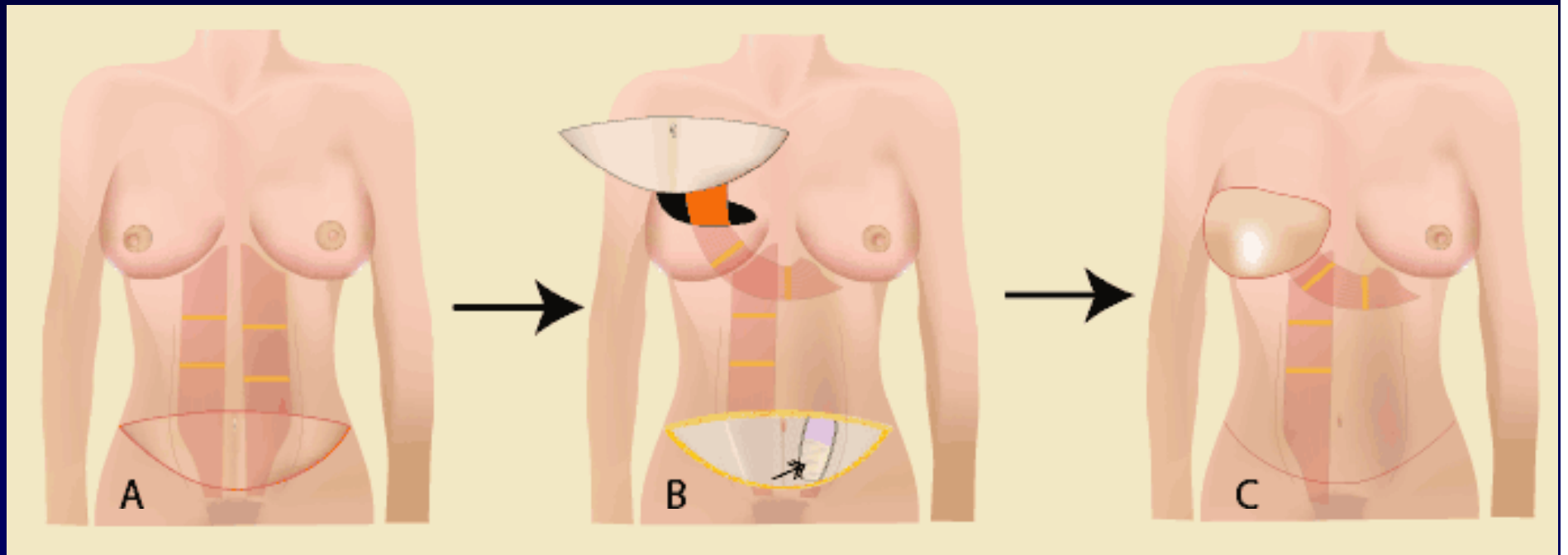
- Foreign body
- Capsular contracture
- Wear and tear
- Silicone leak
- Sensation



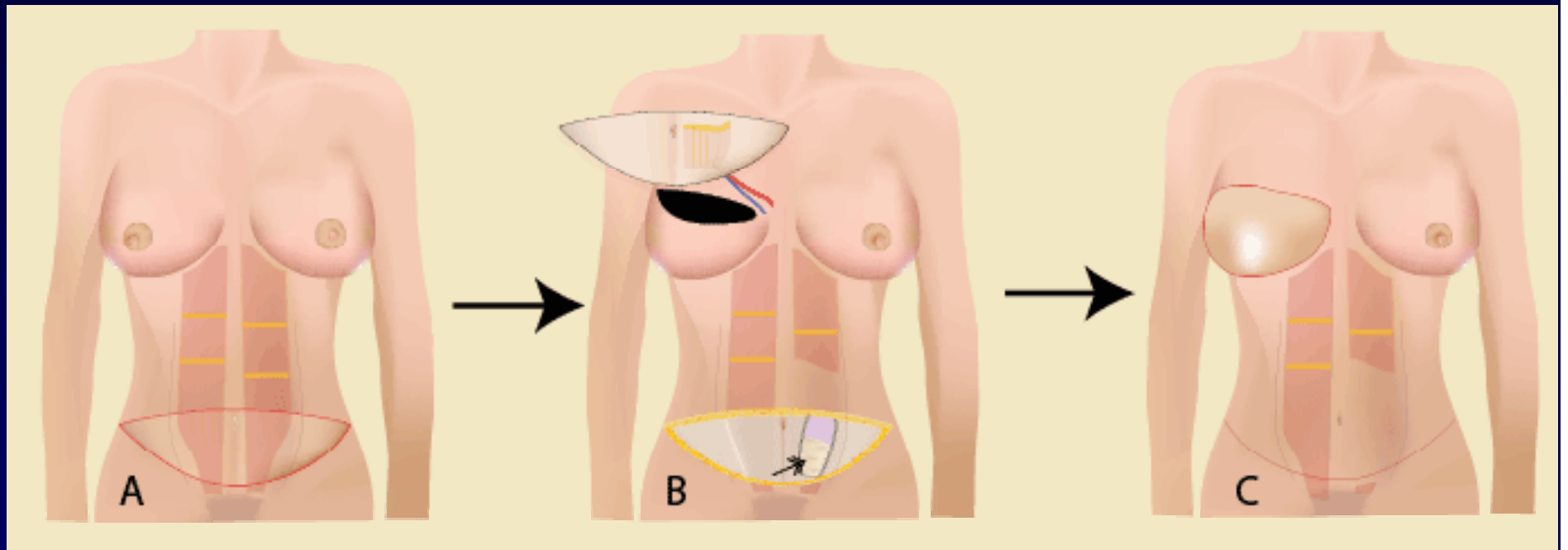
Autologous Reconstruction

- Abdomen
 - TRAM ,DIEP
- Gluteus
 - SGAP, IGAP
- Other donor sites
 - Thigh, hips

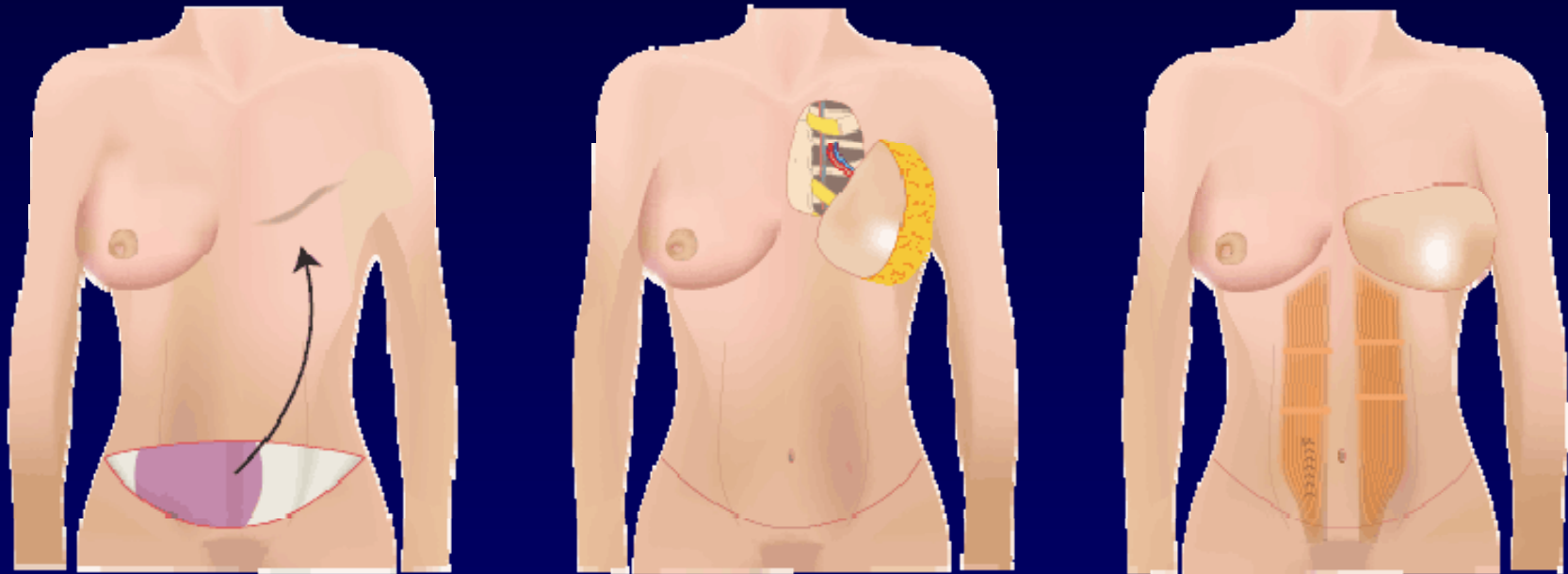
Pedicled TRAM



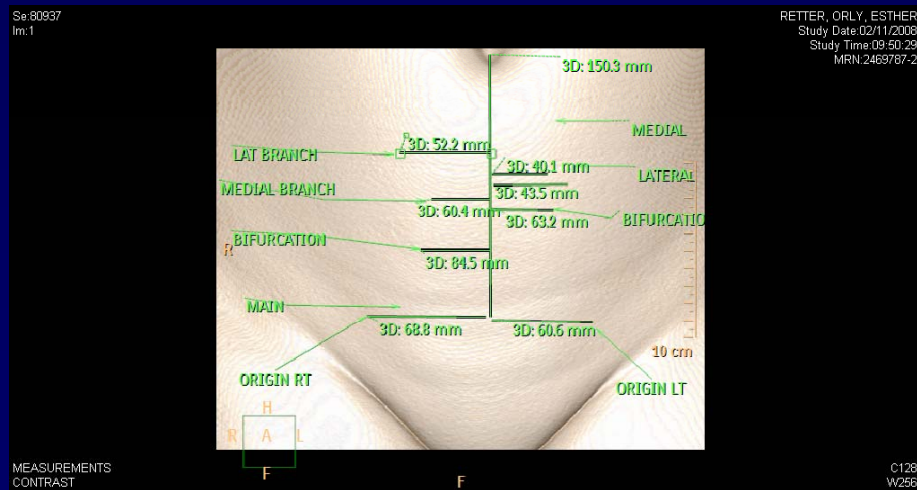
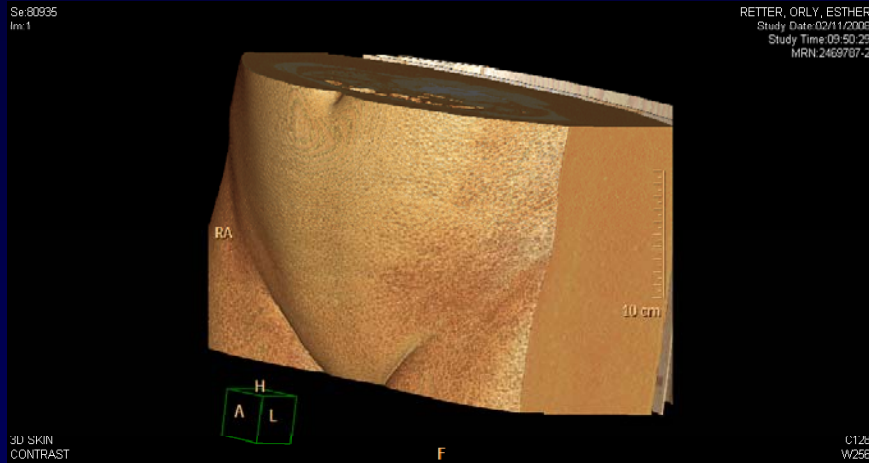
Free TRAM

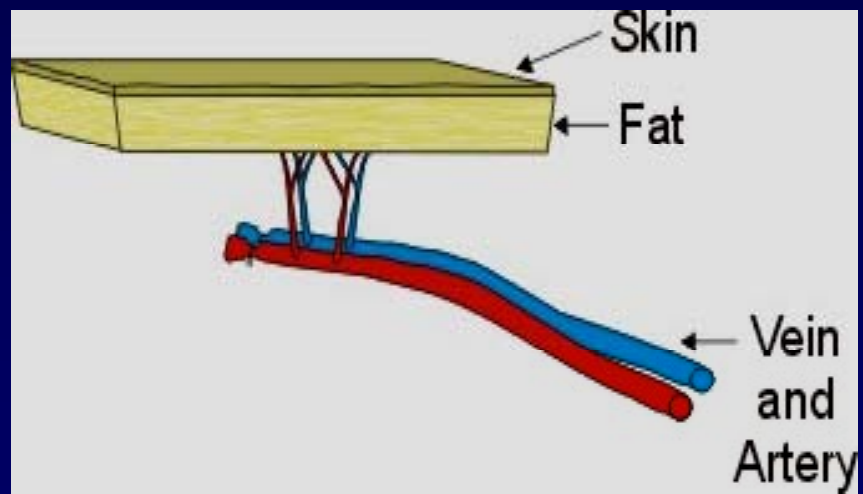
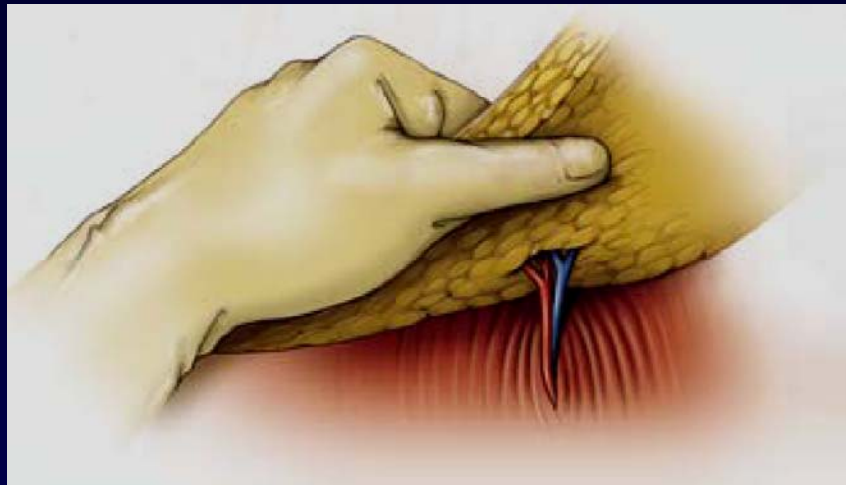


Perforator Flaps (DIEP, SIEA)



Pre-Op CT Angiography

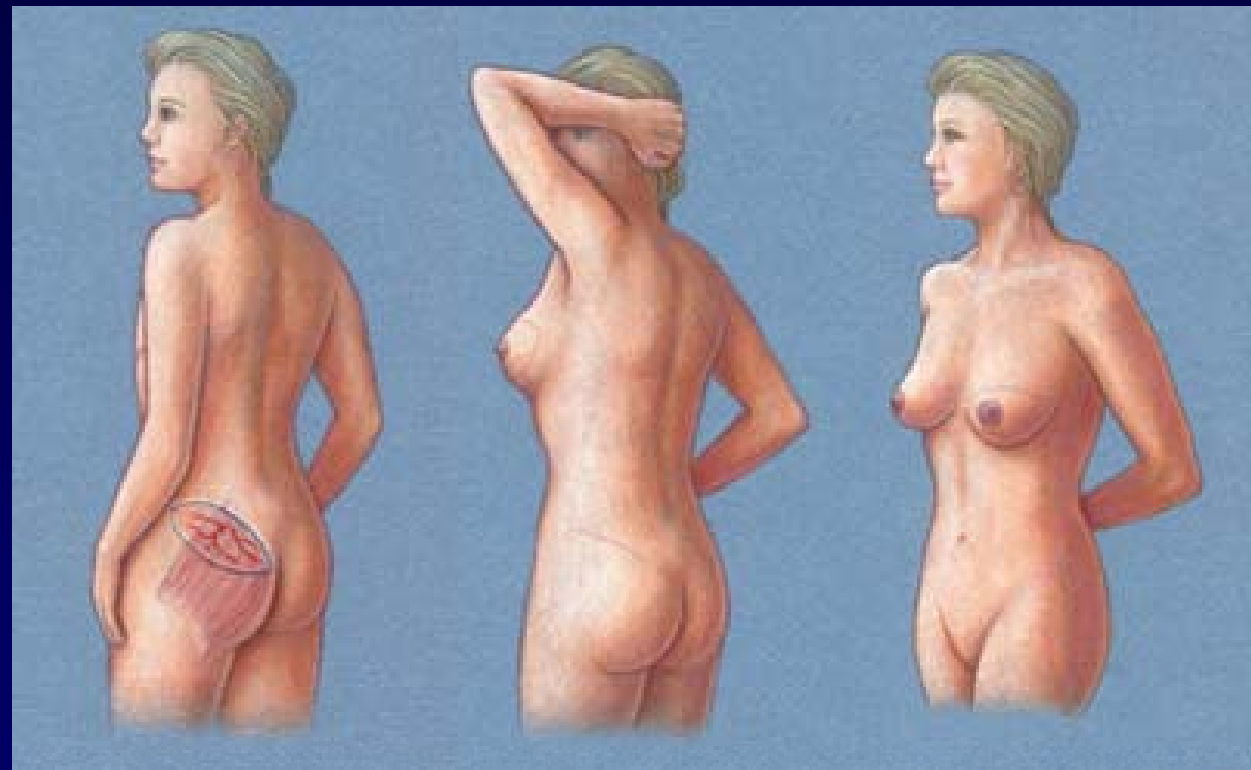
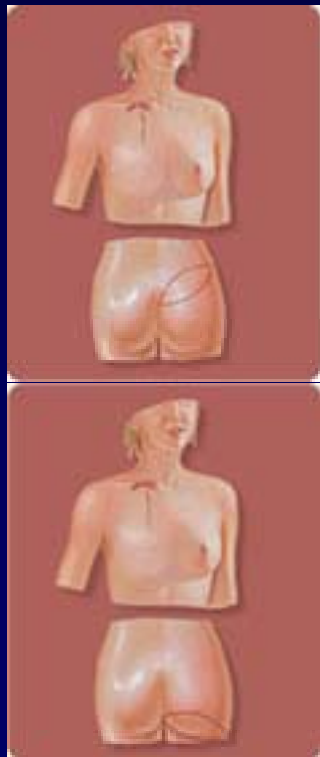




Donor-Site Morbidity



Gluteus Perforator Flap (GAP)



Autologous Reconstruction

➤ Pros

- Sensation
- No foreign body
- No capsular contracture
- One operation
- Permanent reconstruction
- Natural look



Autologous Reconstruction

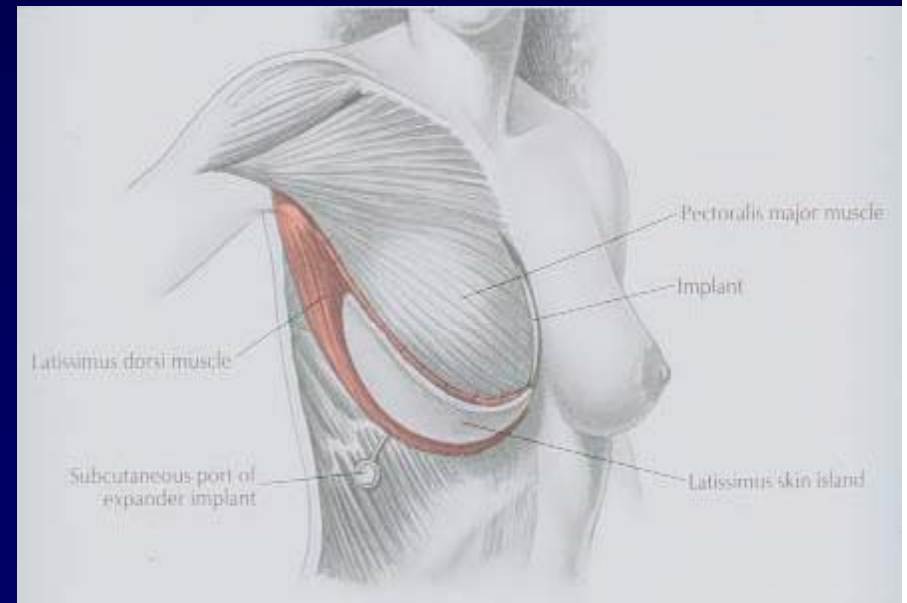
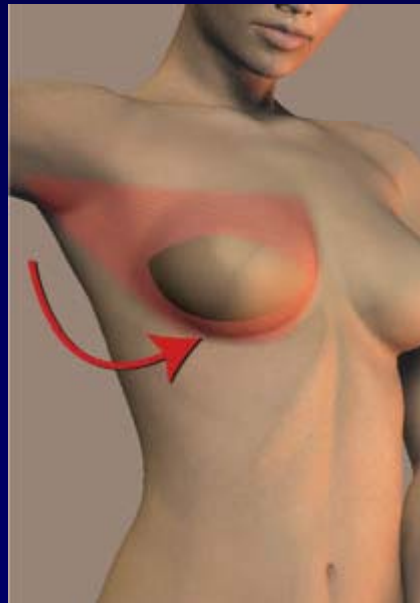
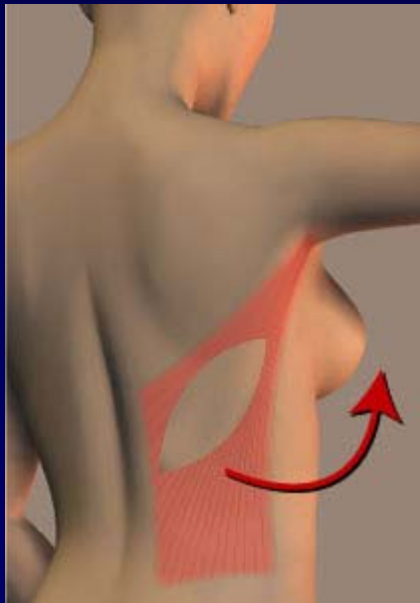
➤ Cons

- Donor-site morbidity
 - Scars
 - Abdominal wall weakness and hernia
 - Buttock distortion
 - Seroma
- Long operation
- Partial / total flap loss



Combined Autologous With Implant

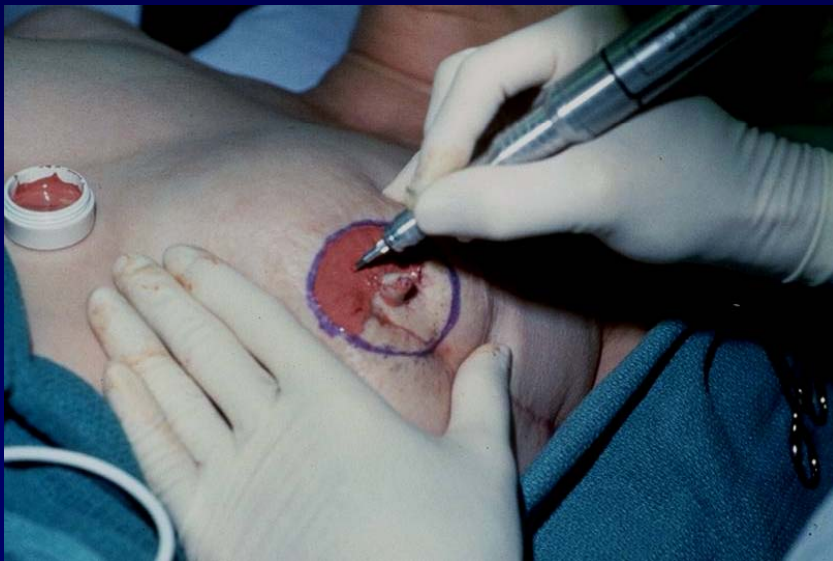
- Latissimus dorsi skin and muscle with implant



Nipple and Areola Reconstruction

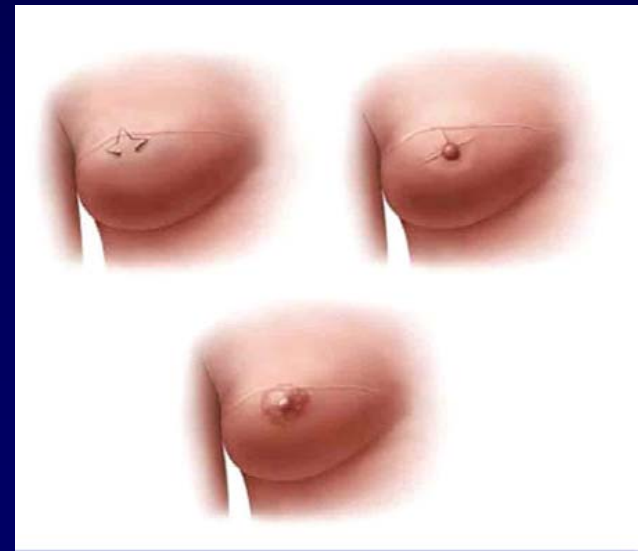
➤ Areola

- Skin graft
- Tattoo



➤ Nipple

- Skin flaps
- Nipple-sharing
- Graft



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Thank You

