

Breast reconstruction after prophylactic mastectomy

Maria Mani, MD, PhD

Associate Professor and Consultant Plastic Surgeon

Director of Microsurgery

Uppsala University Hospital

Uppsala, Sweden

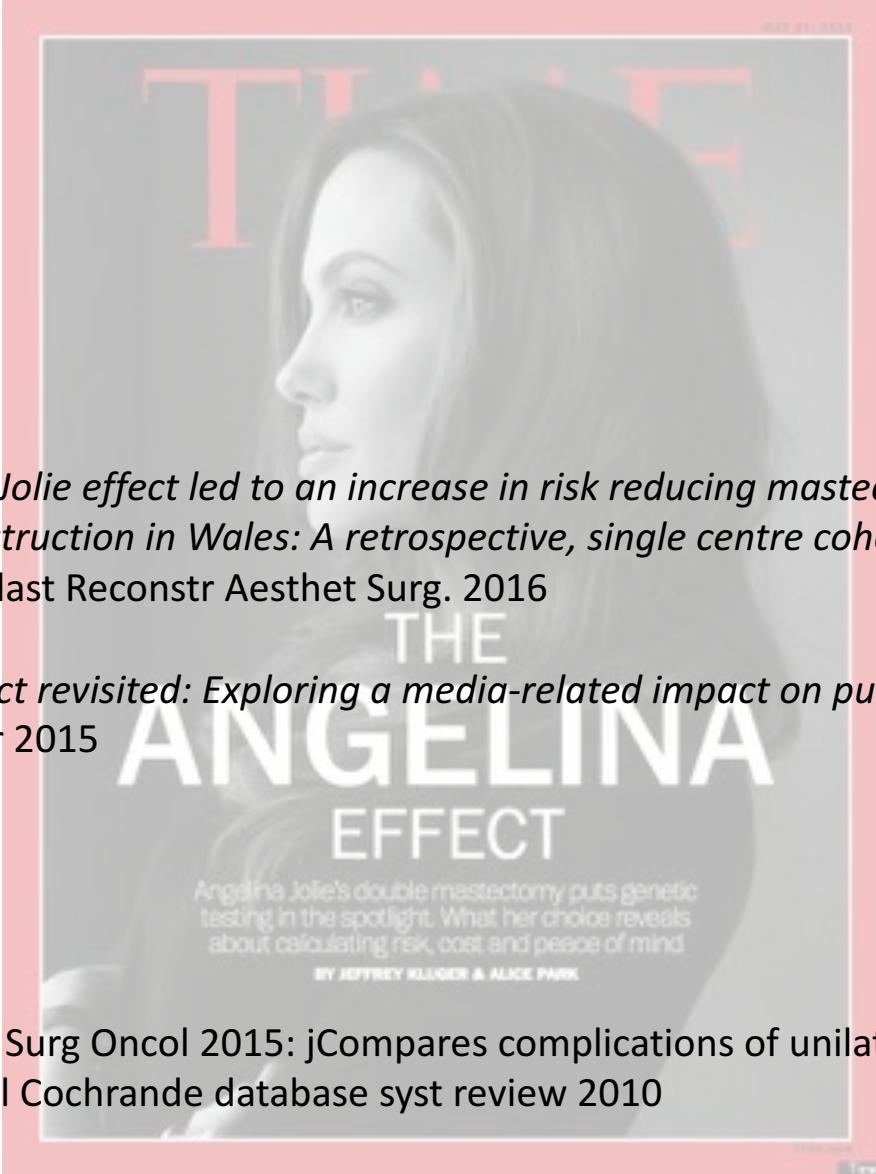
Kirurgveckan, Helsingborg 2018



UPPSALA
UNIVERSITET







Has the Angelina Jolie effect led to an increase in risk reducing mastectomy and breast reconstruction in Wales: A retrospective, single centre cohort study.

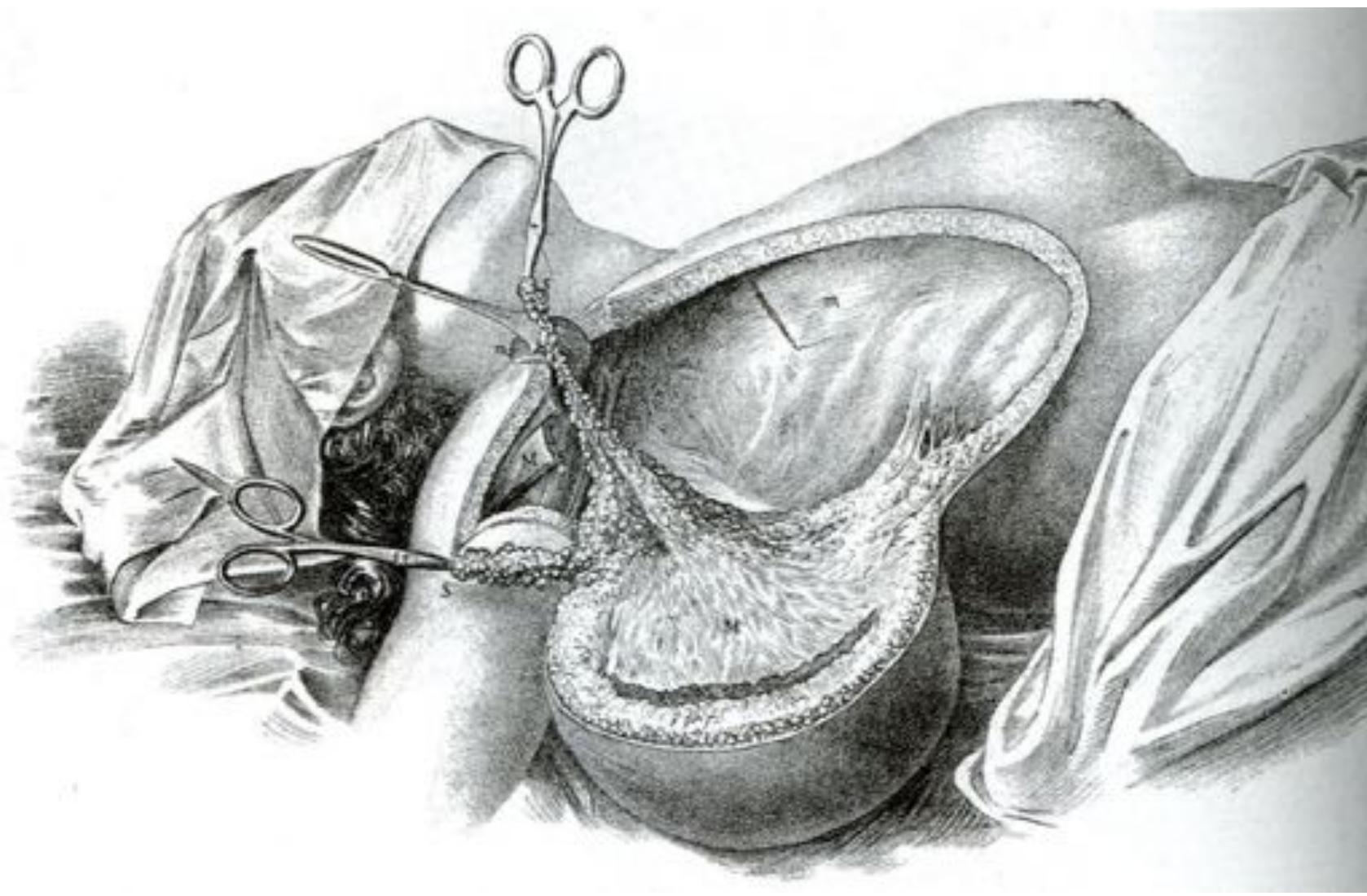
Malcolm et al. J Plast Reconstr Aesthet Surg. 2016

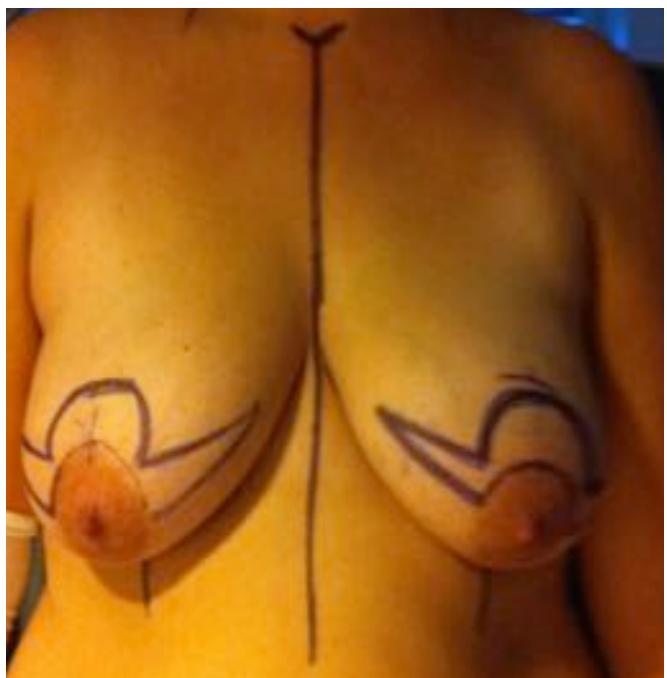
The Angelina effect revisited: Exploring a media-related impact on public awareness

Lebo et al. Cancer 2015

Silva et al Ann Surg Oncol 2015: jCompares complications of unilateral compared to bilateral
Lostumbo et al Cochrane database syst review 2010





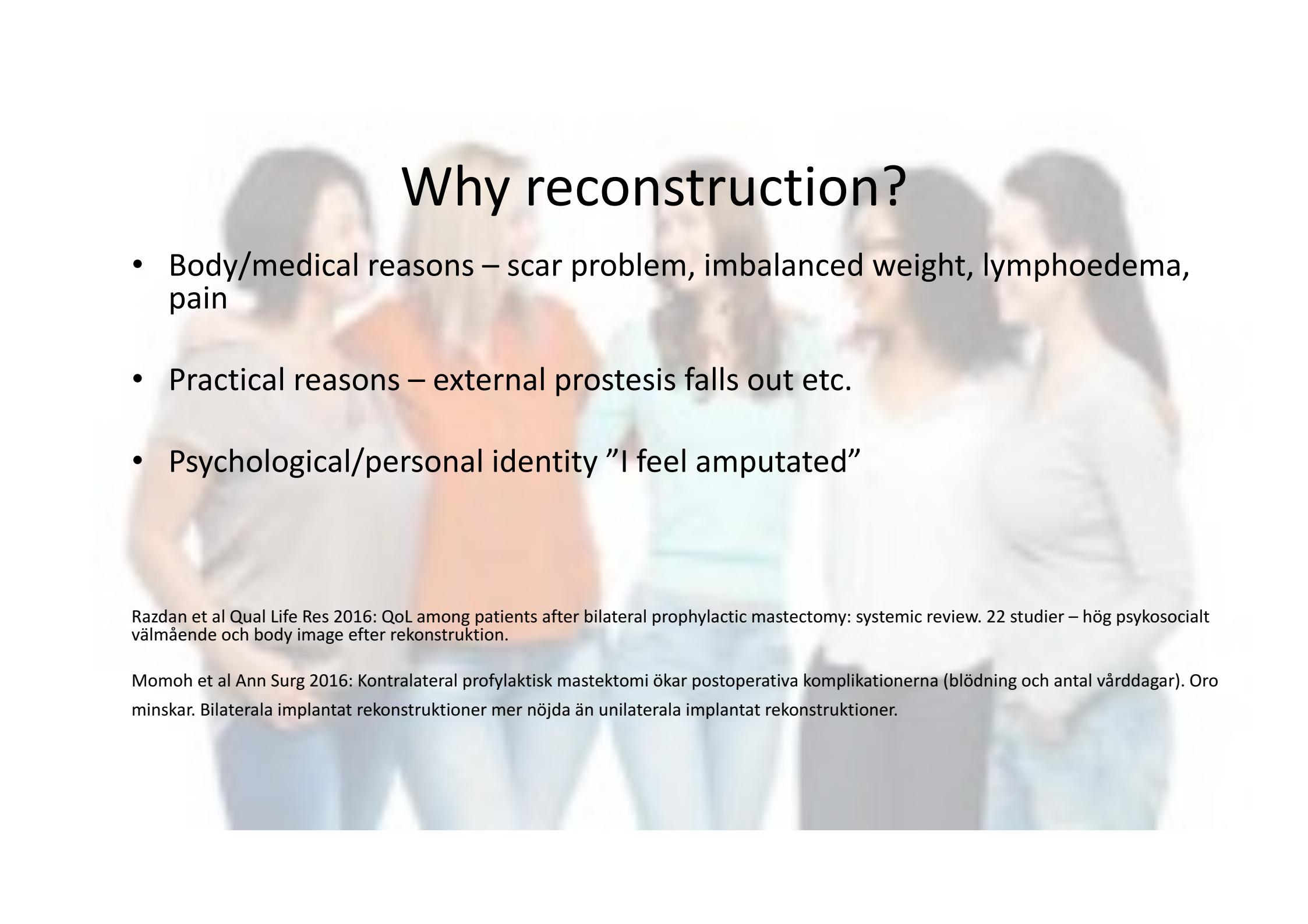


Different mastectomies leaves different defects to reconstruct

- “Traditional”
- Skinsparing
- Nipplesparing

Why reconstruction?





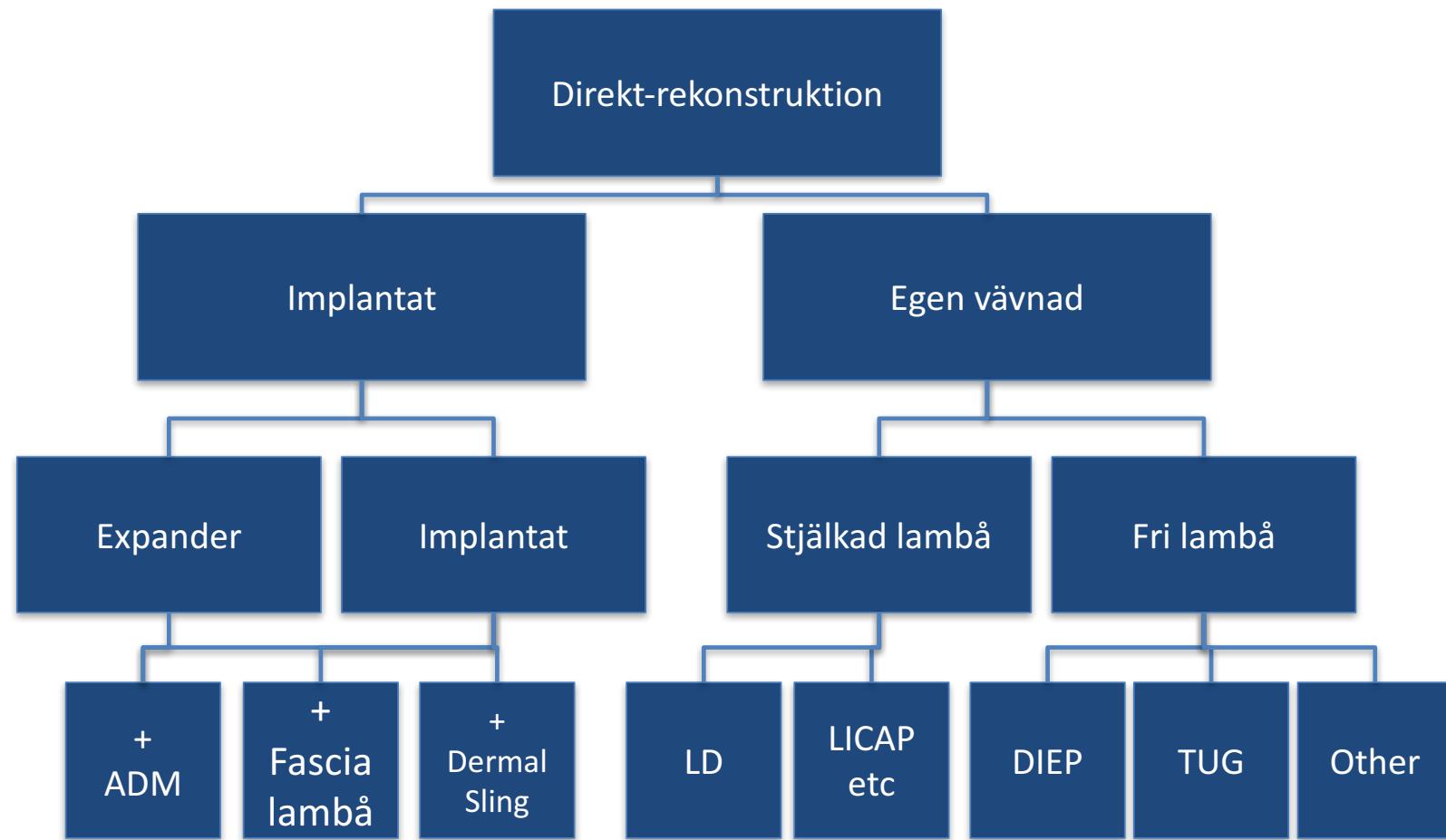
Why reconstruction?

- Body/medical reasons – scar problem, imbalanced weight, lymphoedema, pain
- Practical reasons – external prosthesis falls out etc.
- Psychological/personal identity "I feel amputated"

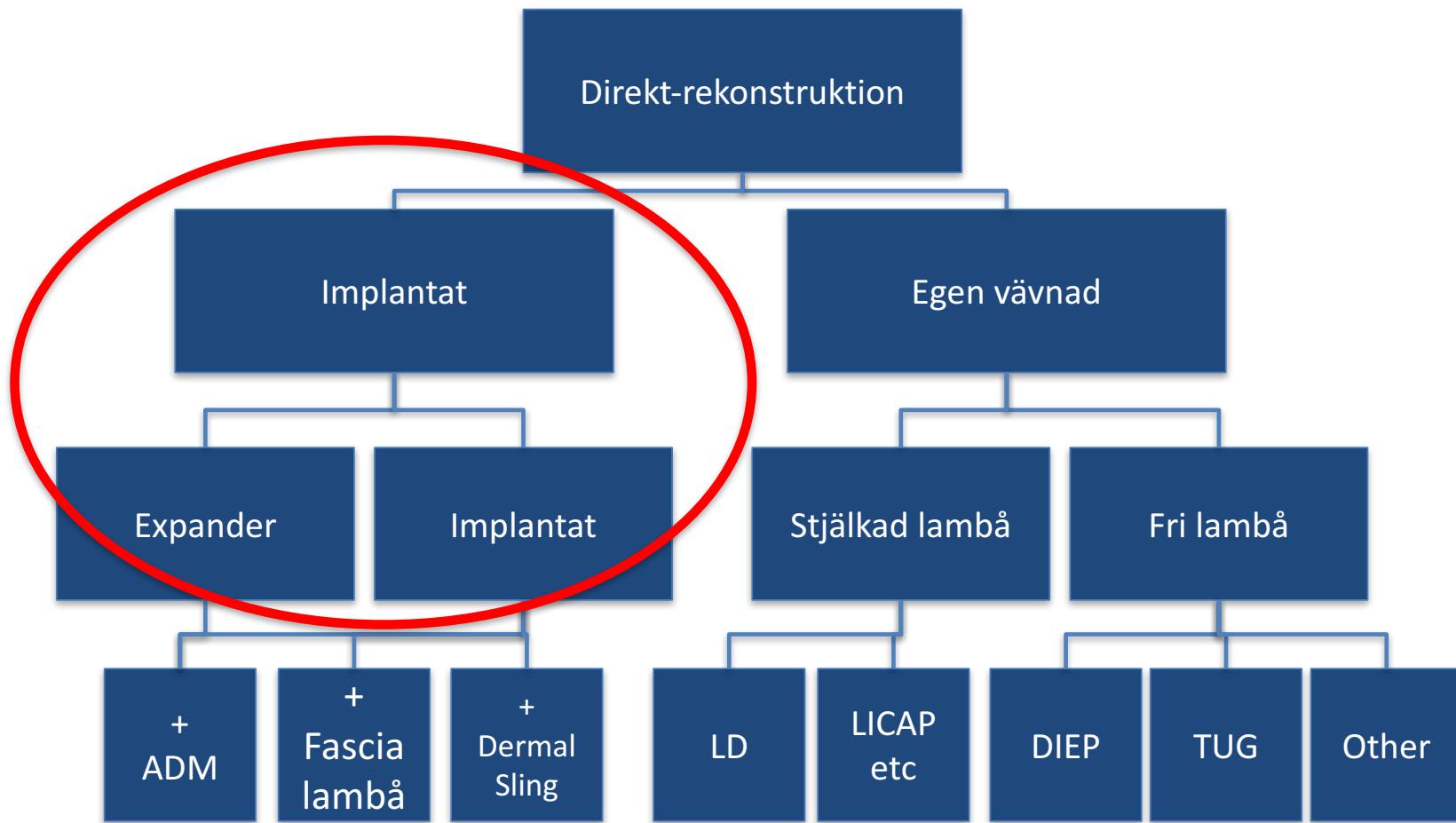
Razdan et al Qual Life Res 2016: QoL among patients after bilateral prophylactic mastectomy: systemic review. 22 studier – hög psykosocialt välmående och body image efter rekonstruktion.

Momoh et al Ann Surg 2016: Kontralateral profylaktisk mastektomi ökar postoperativa komplikationerna (blödning och antal vårddagar). Oro minskar. Bilaterala implantat rekonstruktioner mer nöjda än unilaterala implantat rekonstruktioner.

Breast reconstruction techniques



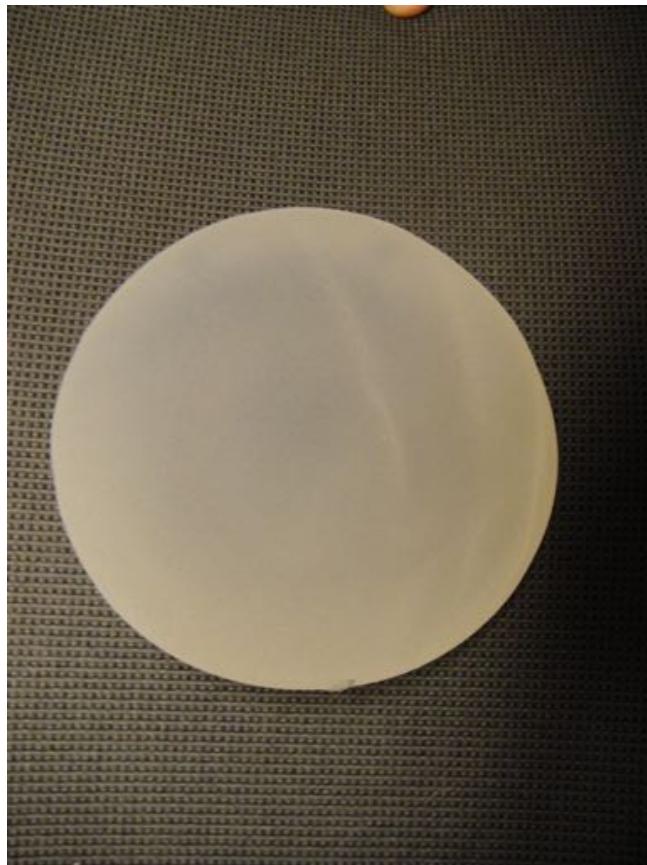
Breast reconstruction techniques



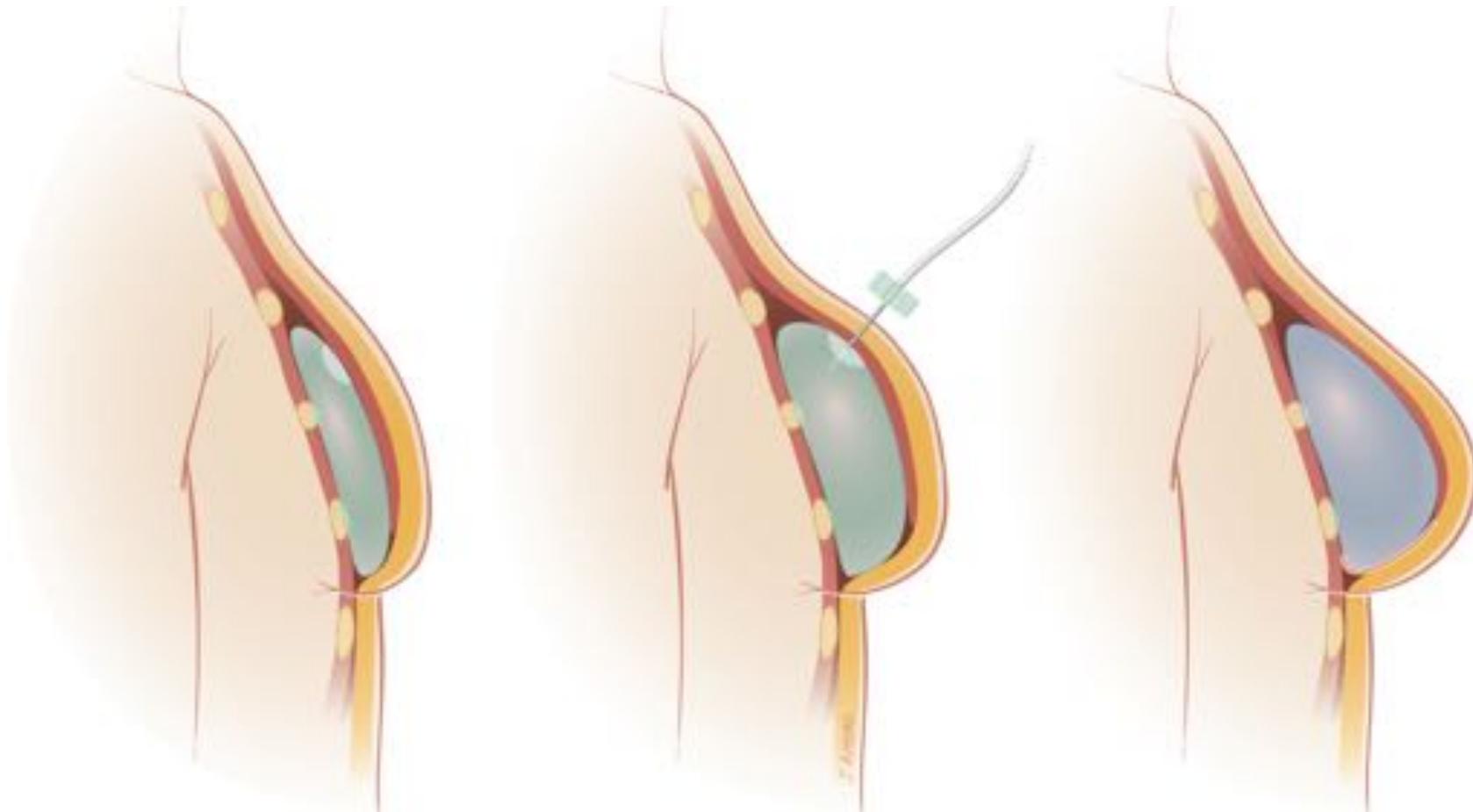
Expander



Silicon implantat



Expander



Implantat

To cover lower pole

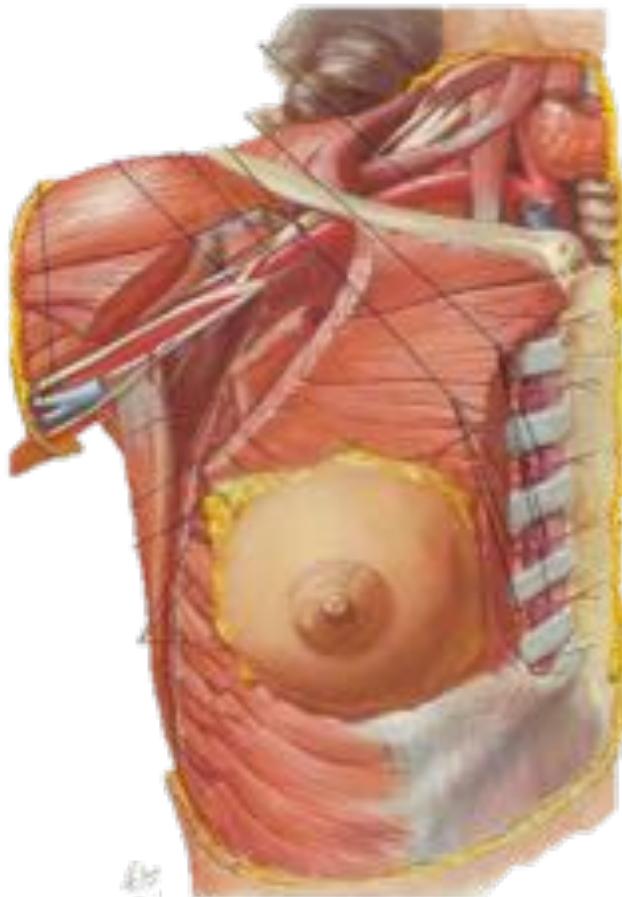
- "Dermal sling"
- Fascia flap
- Acellular Dermal Matrix (ADM)/Meshes



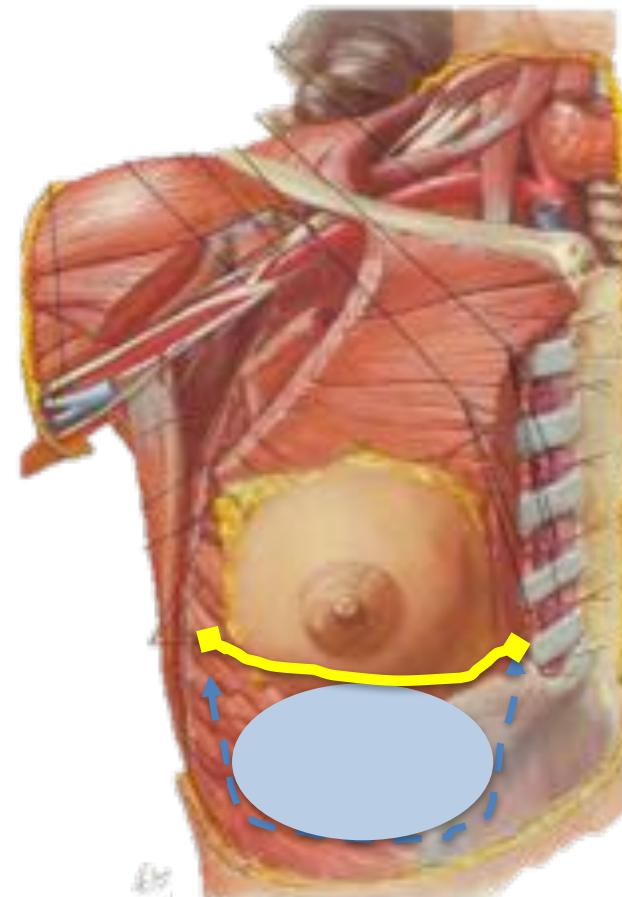
Immediate reconstruction with dermal sling



Rectus abdominus fascia and parts of fascia of the serratus muscle

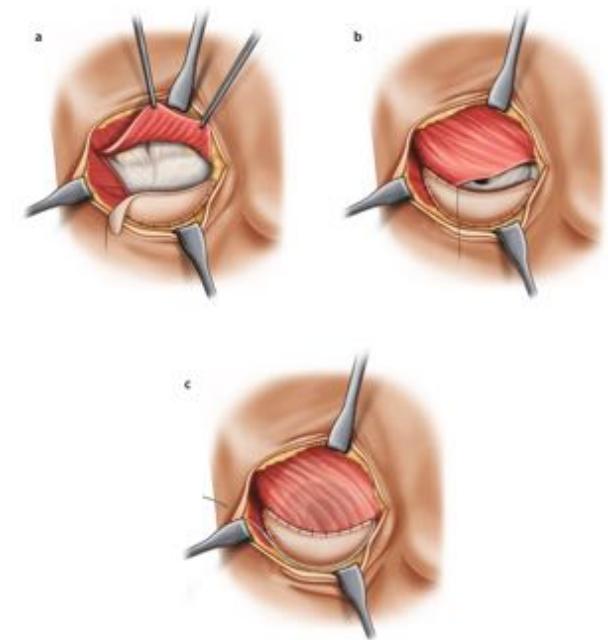
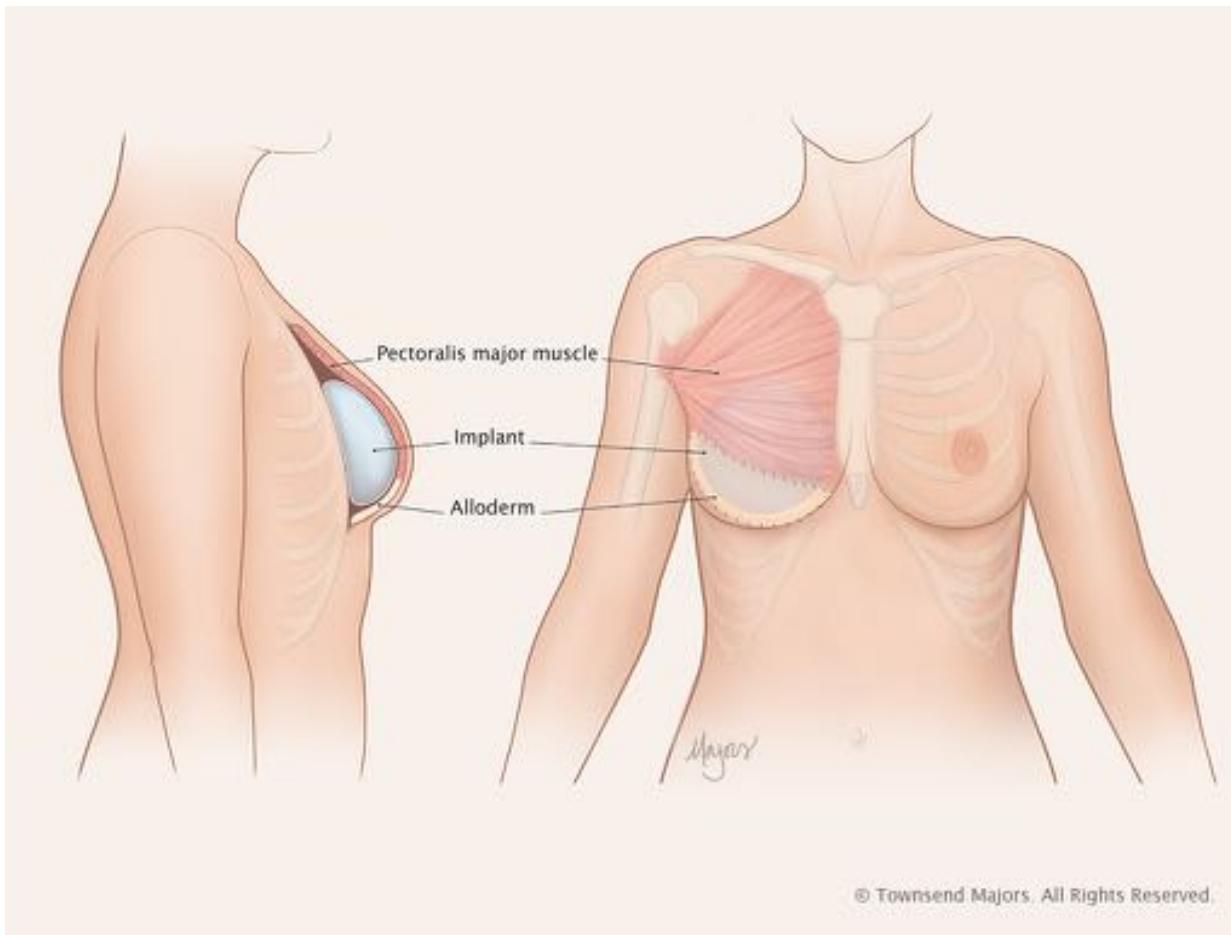


(Netter Atlas)





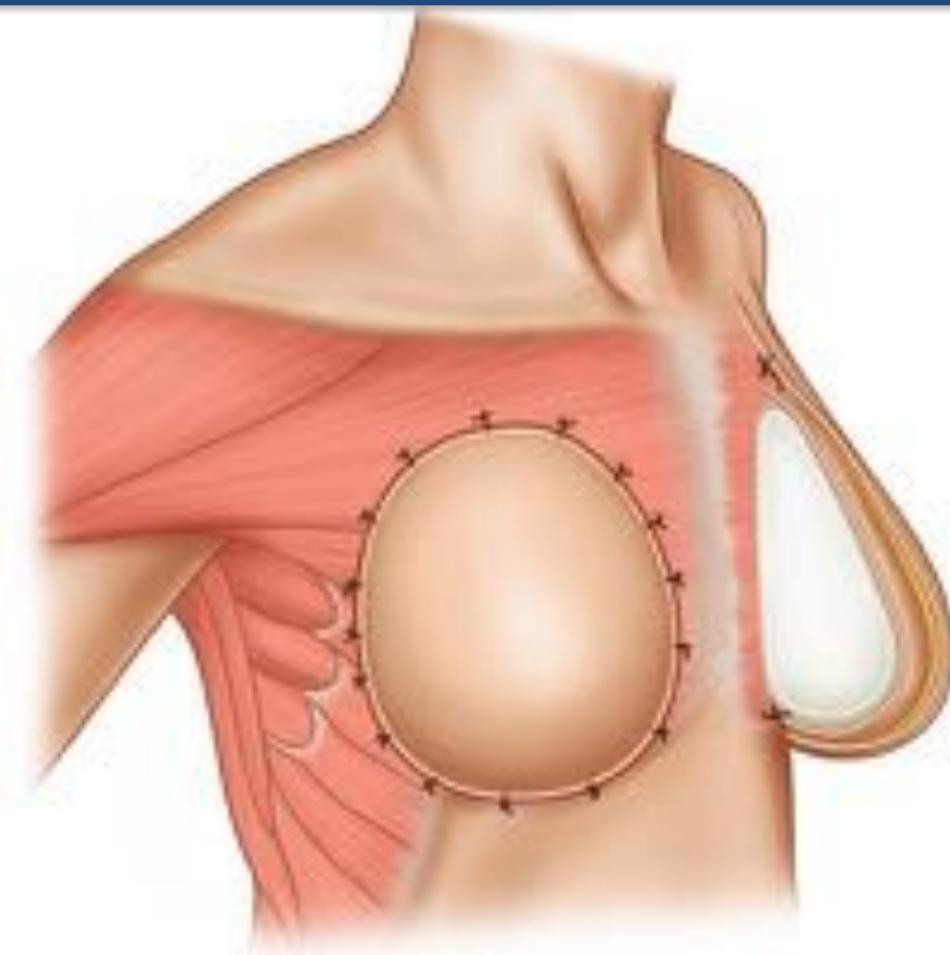
ADM – acellular dermal matrix



Shaun D. et al PRS GO, 2018
The BREASTrial Stage II: ADM Breast Reconstruction
Outcomes from Definitive Reconstruction to 3 Months
Postoperative
Casella D, Breast 2018

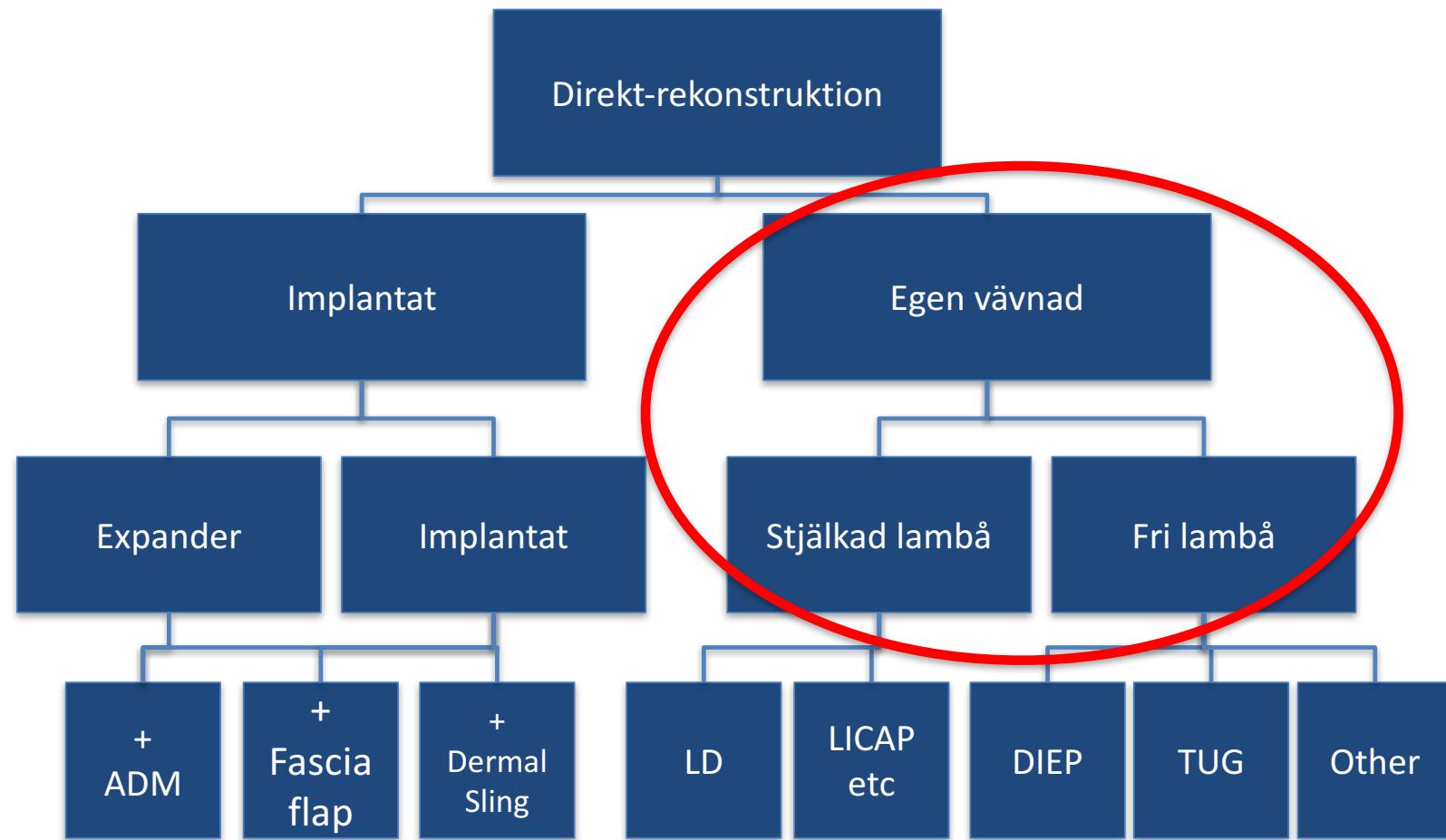


Total mesh/ADM covered implant pre-pectoral



Berna et al. 2017, Bernini et al. 2015

Breast reconstruction techniques

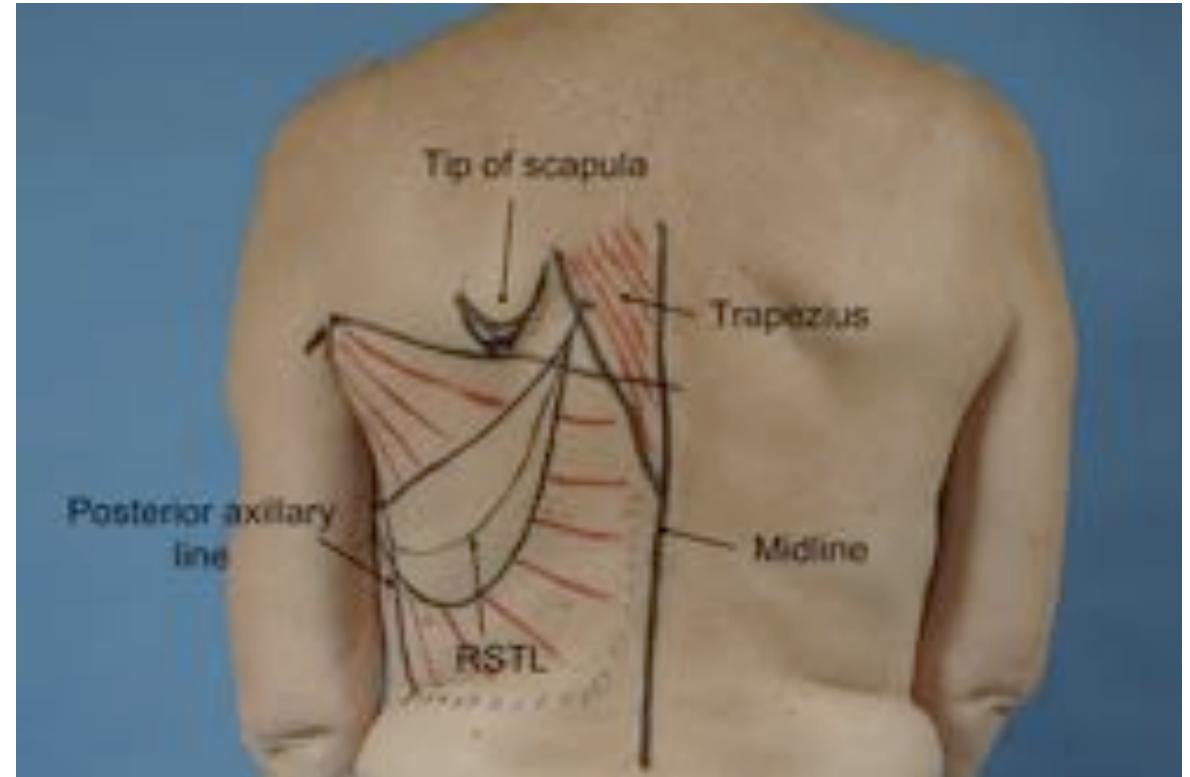
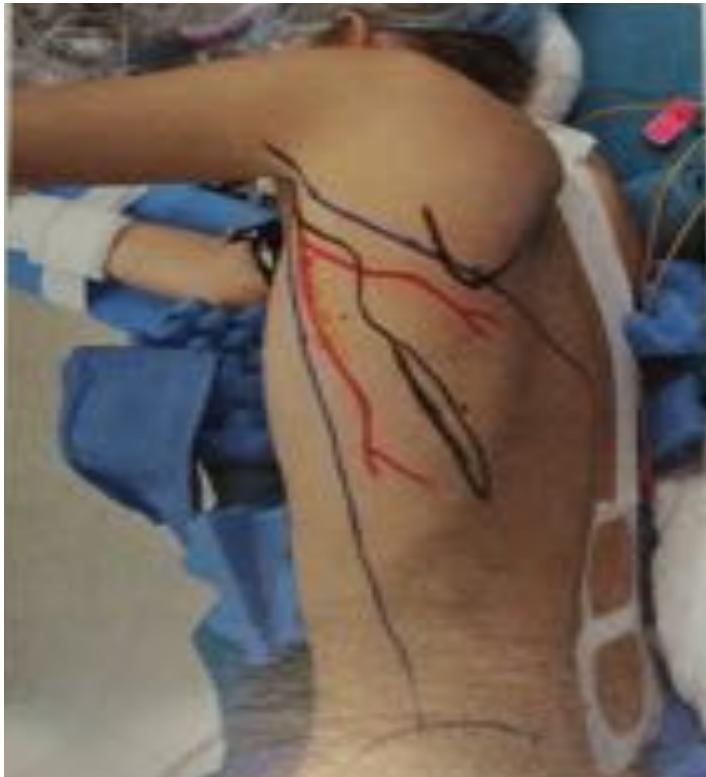


Pedicled flap ("Stjälkad lambå")

- Latissimus dorsi flap-



Pedicled LD flap based on thoracodorsal vessels



Hammond



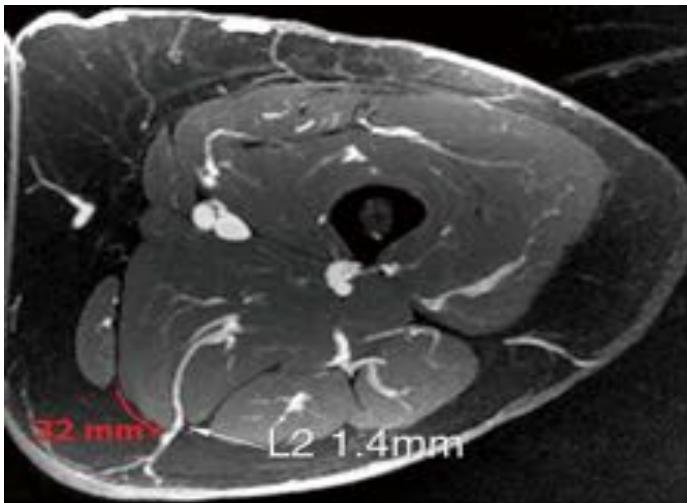
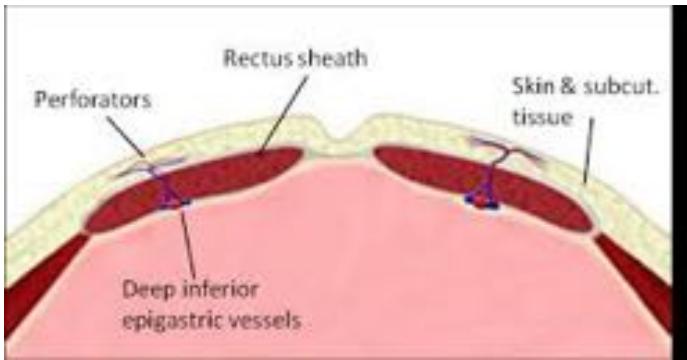
LD + implant

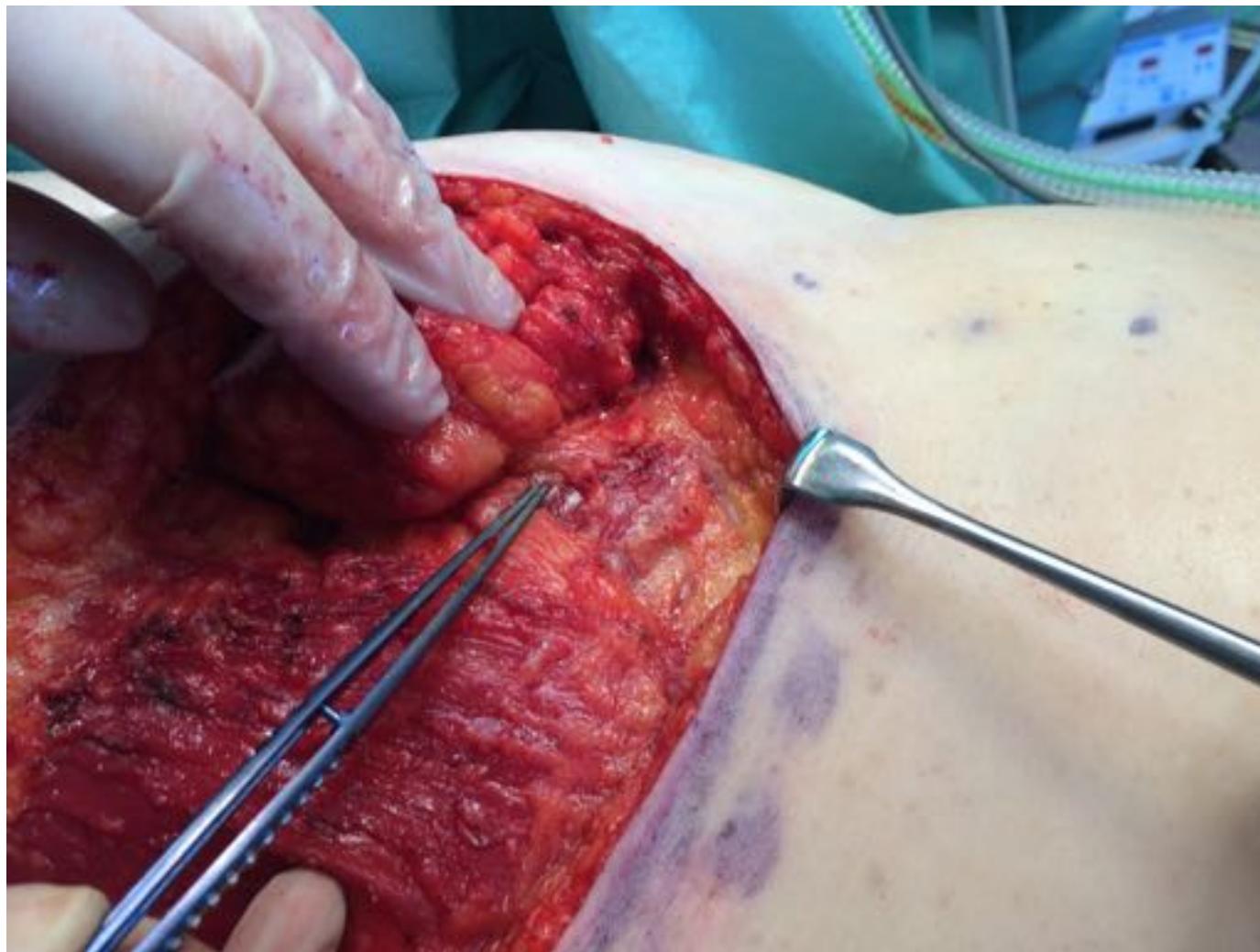




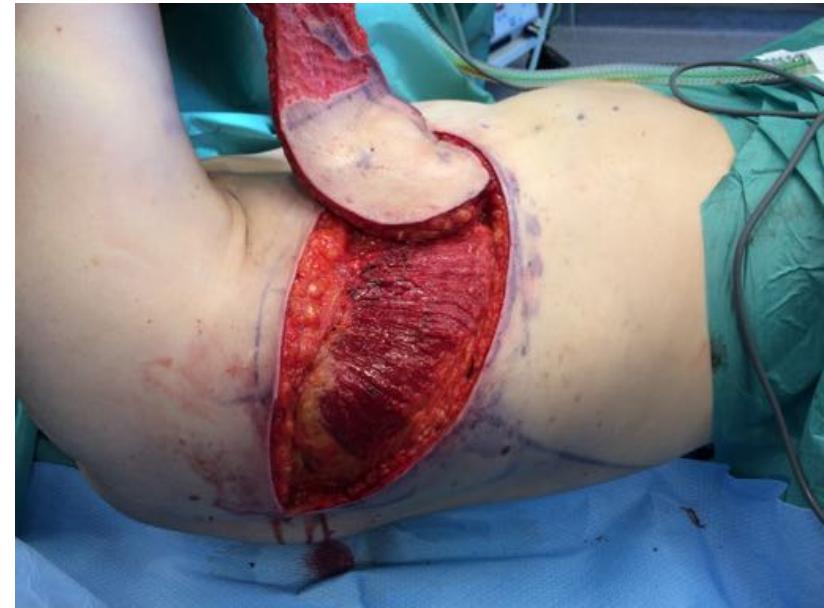
Perforator flaps =

Tissue (flap) based on the vascularisation of specific perforator



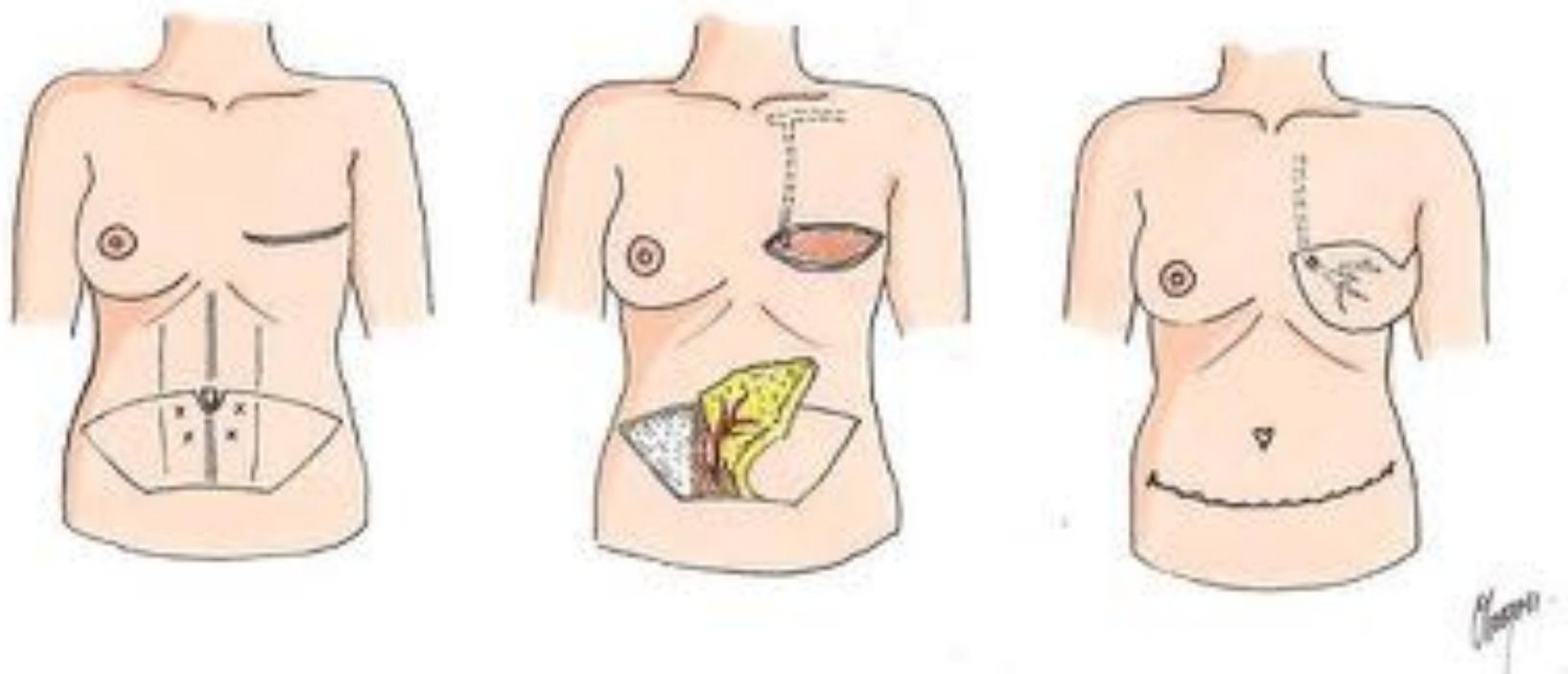


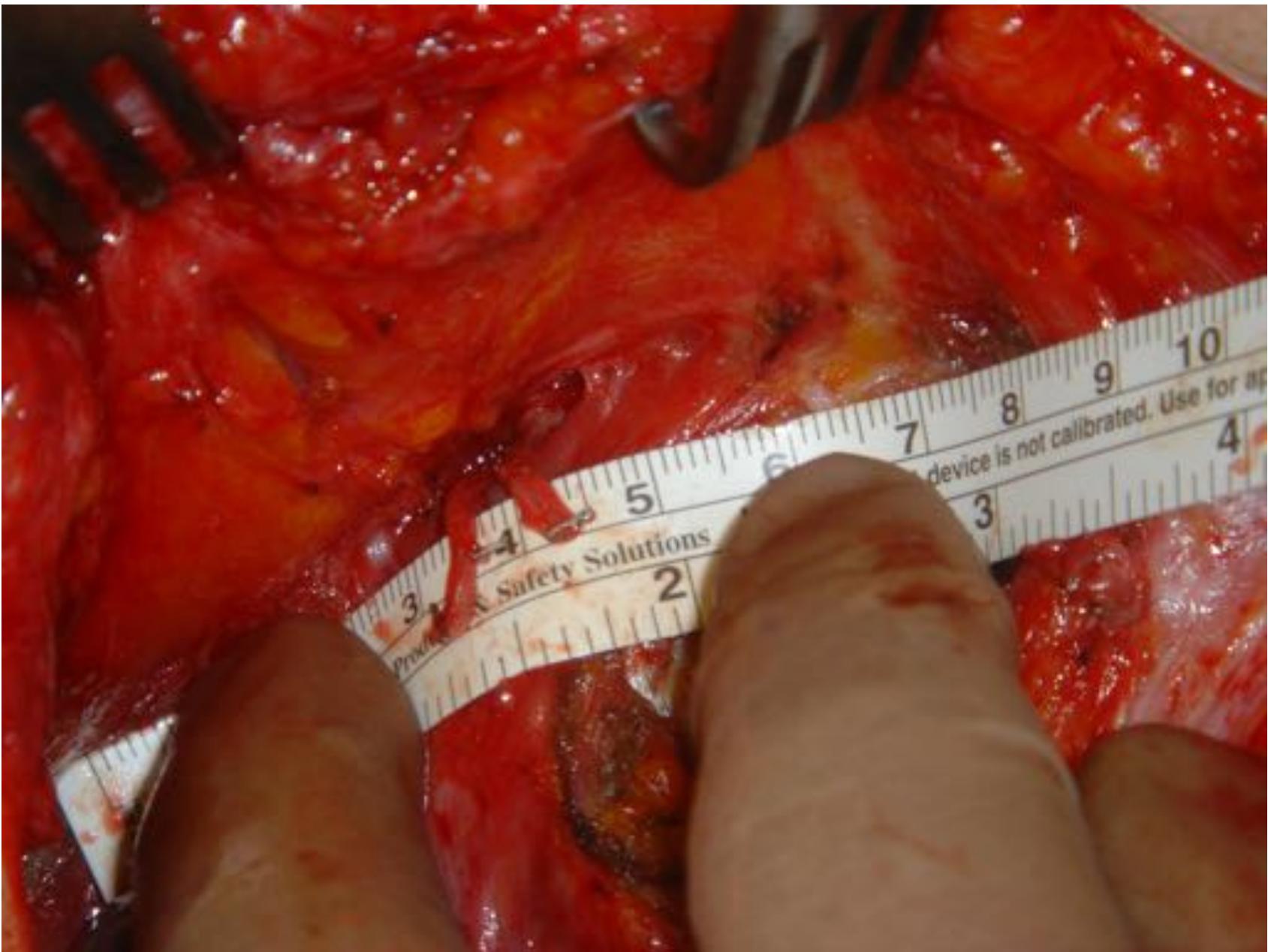
Perforator dissection increases flap versatility

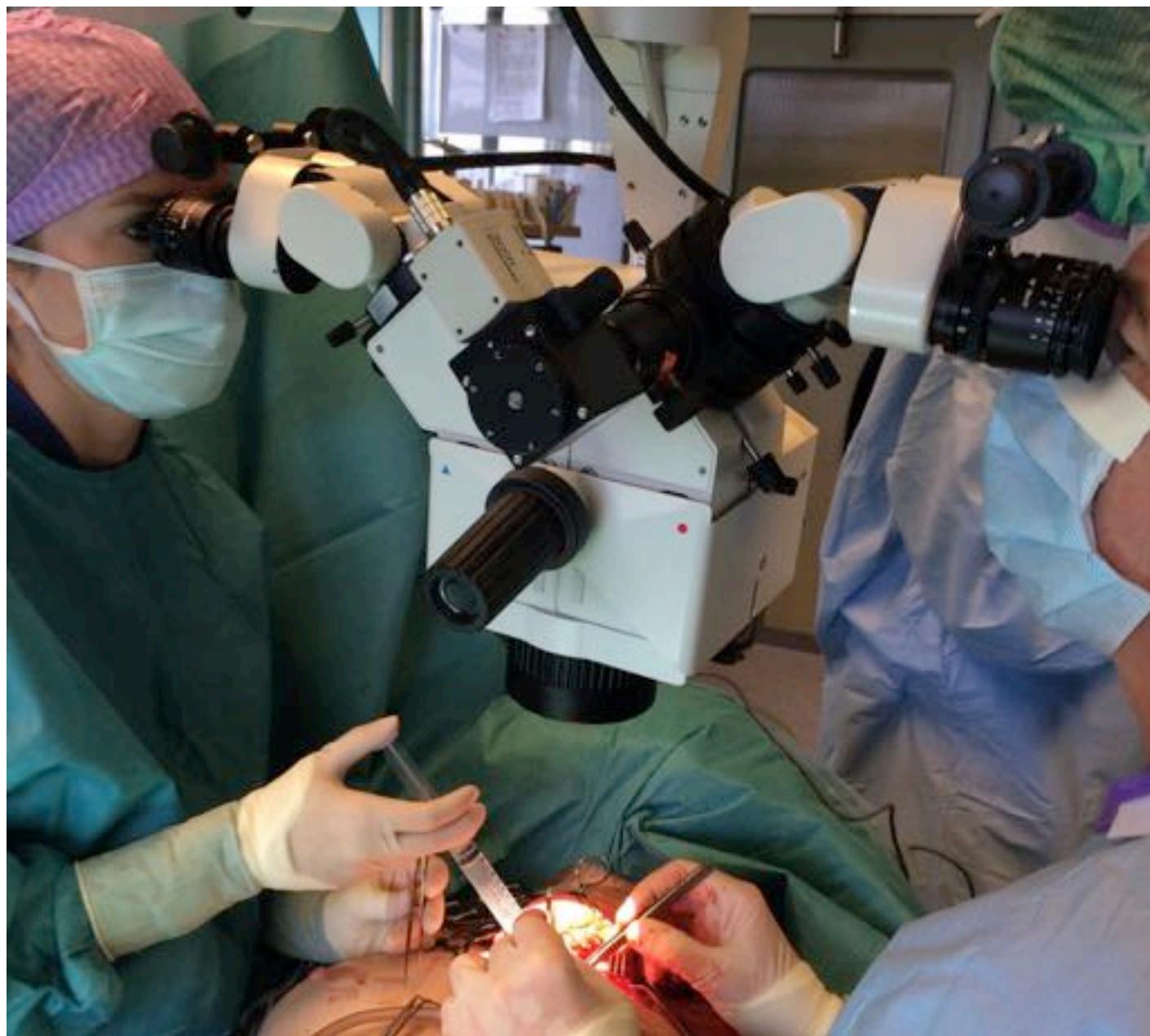


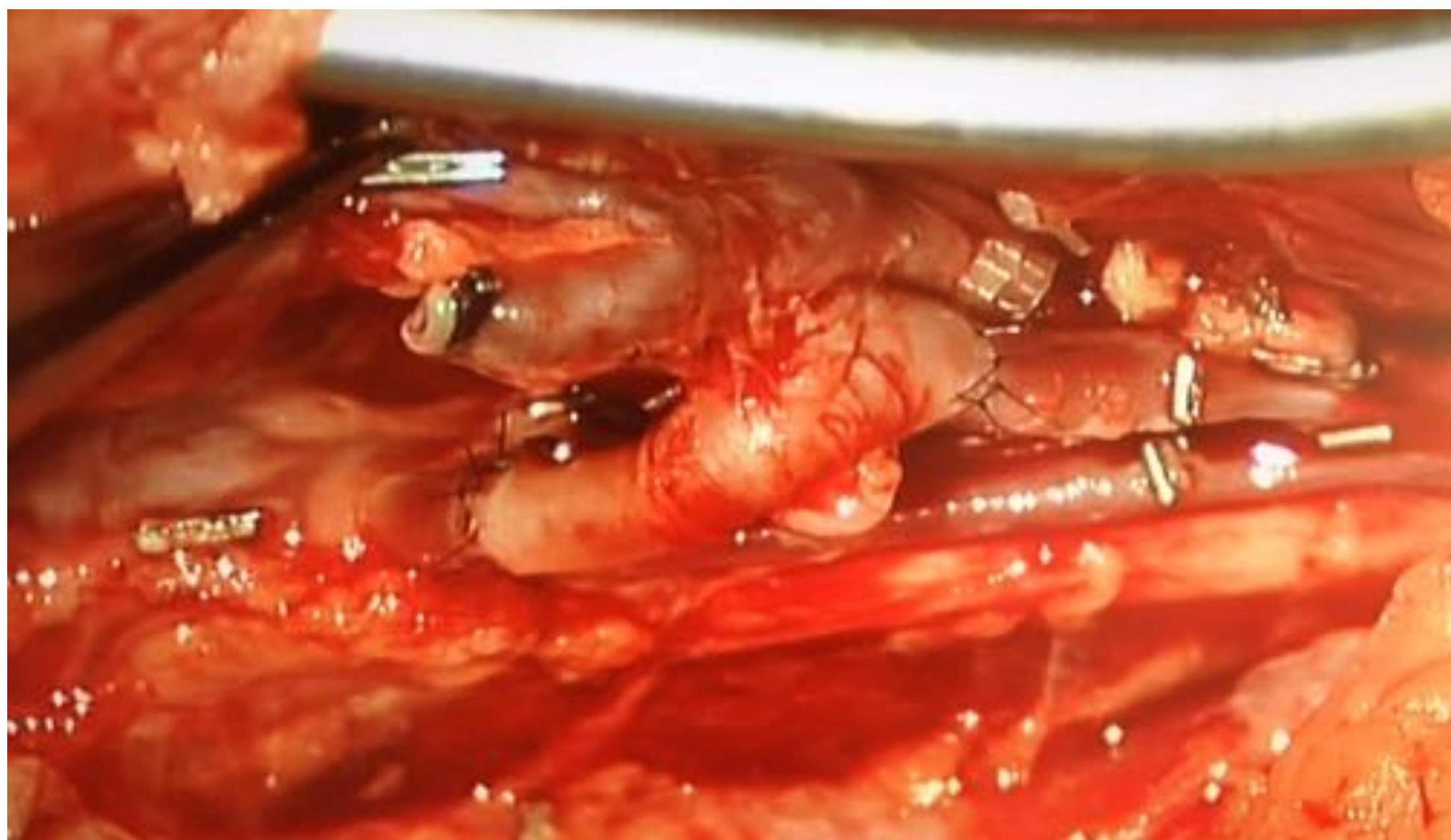
Free flap

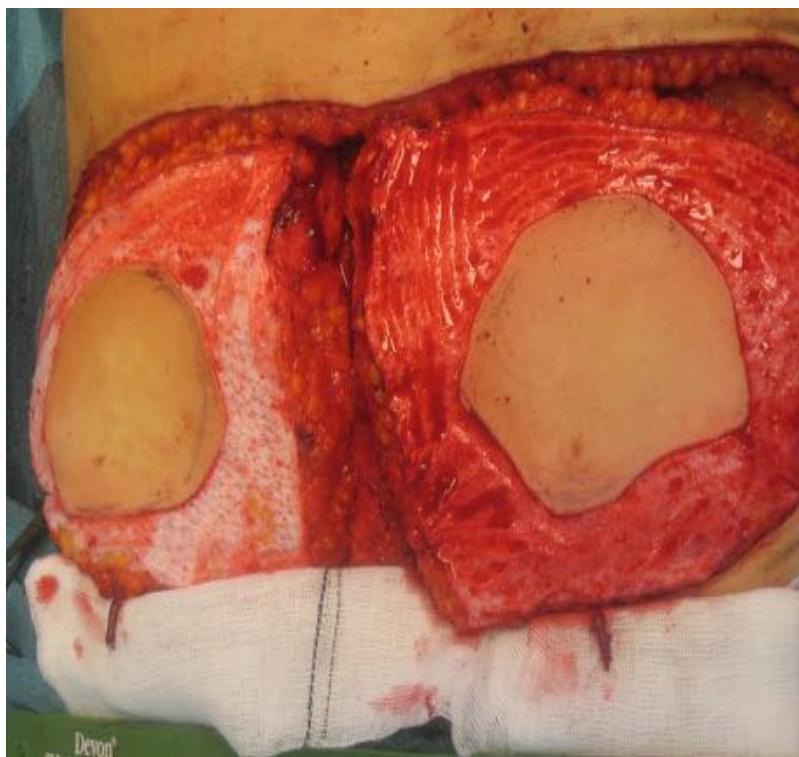
Deep inferior epigastric perforator (DIEP) flap











Bilateral immediate diep reconstruction

Bilateral diep reconstruction in slim patients



Mani et al JPRAS 2017



Stable Long-Term Results

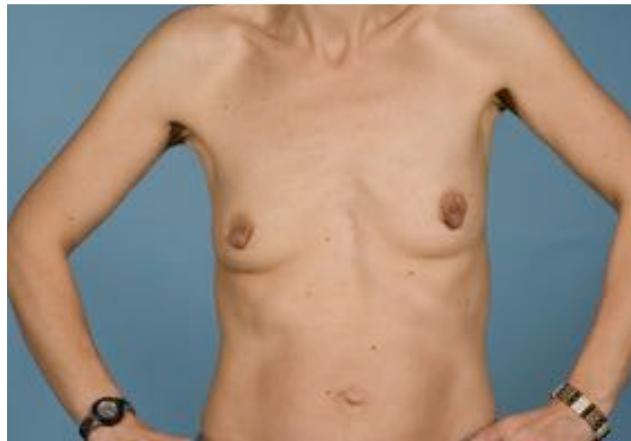


Liu , Mani et al. Patients with Abdominal-based Free Flap Breast Reconstruction a Decade after Surgery - A Comprehensive Long-term Follow-up Study. *Journal of Plastic Aesthetic and Reconstructive Surgery*, 2018 (Epub ahead of print)

Transverse Upper Gracilis Flap (TUG)



TUG flaps

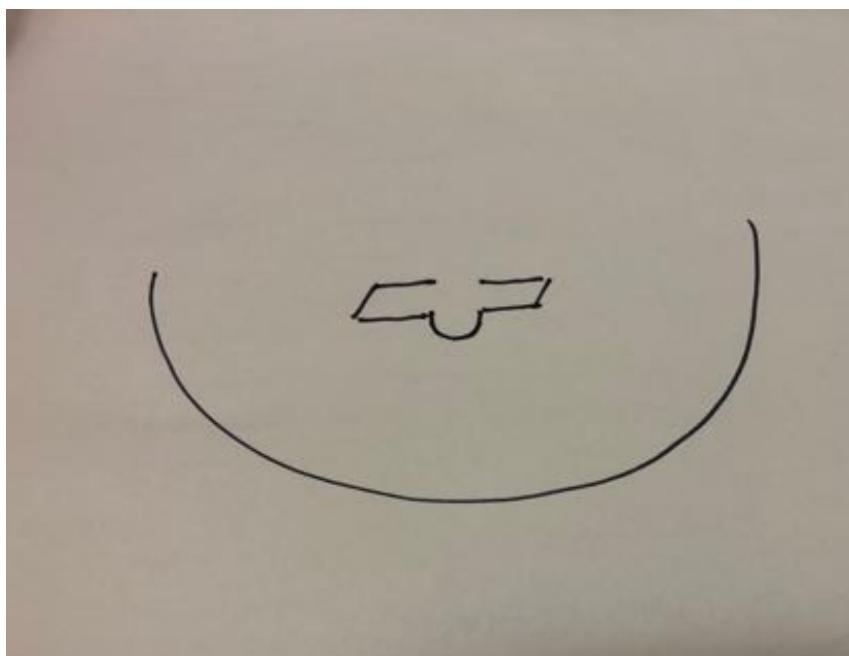


Lateral Thigh Perforator flap - LTP



Nipple reconstruction









Sensate flaps

Breast Cancer Res Treat (2018) 167:687–695
<https://doi.org/10.1007/s10549-017-4547-3>

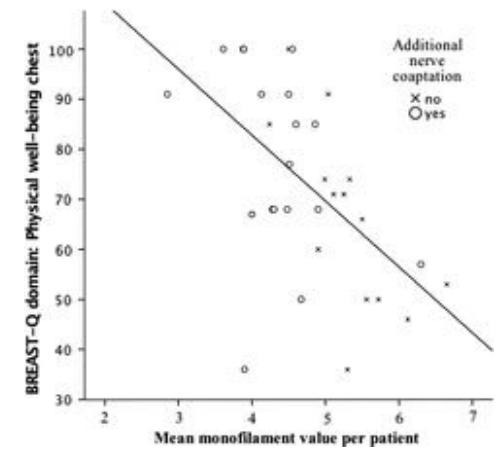


CrossMark

CLINICAL TRIAL

Sensation of the autologous reconstructed breast improves quality of life: a pilot study

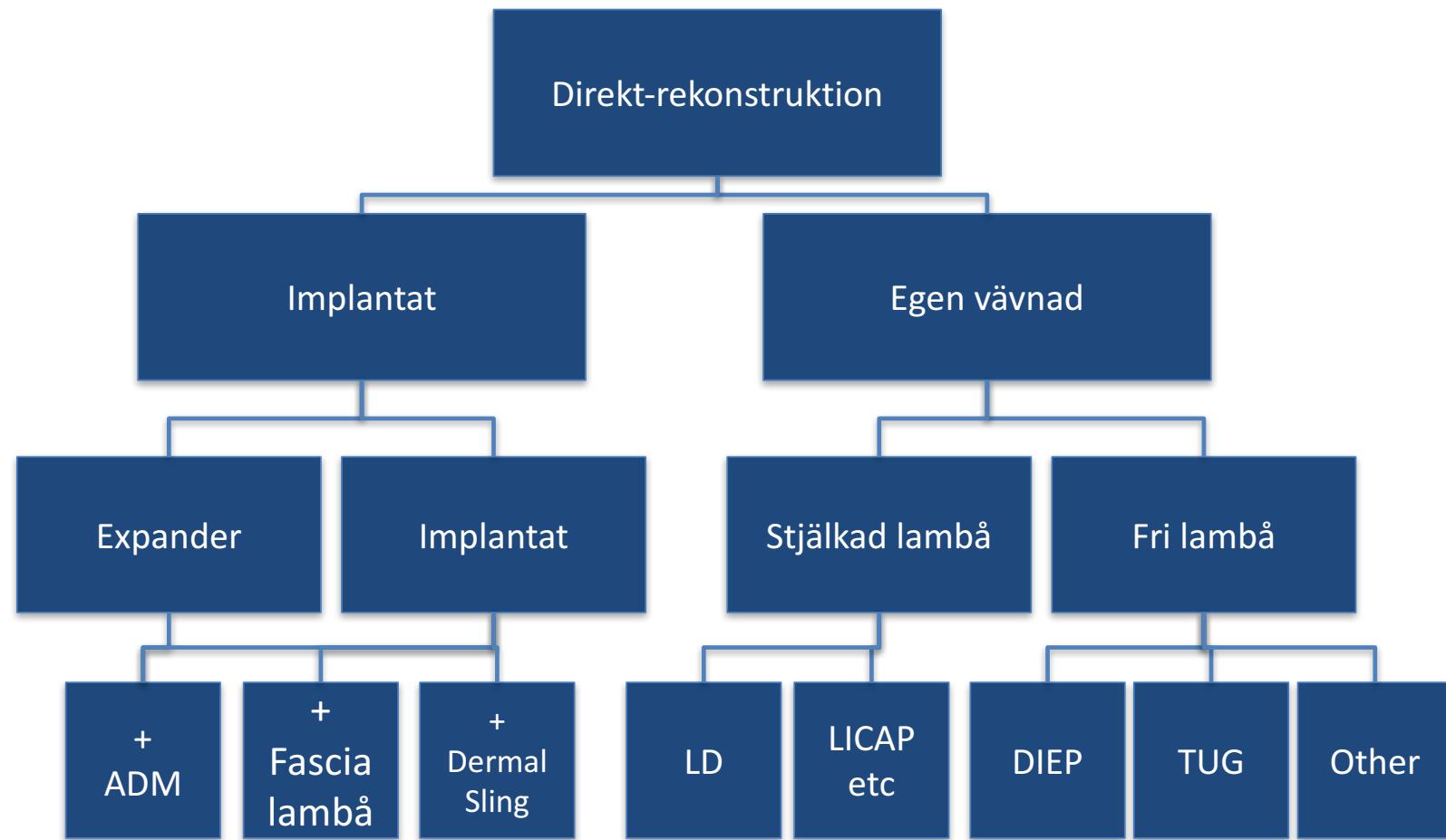
Anouk J. M. Cornelissen¹ · Jop Beugels¹ · Sander M. J. van Kuijk² ·
Esther M. Heuts³ · Shai M. Rozen⁴ · Aldona J. Spiegel⁵ ·
René R. W. J. van der Hulst¹ · Stefania M. H. Tuinder¹







Breast reconstruction techniques





The best method?

- What does the litterture say?
- What does the patient say?
- What does the surgeon say?

Patient wishes and habitual features / resources / competence / timing / complications / priorities

Simple comparison

Implantat/expander

- "Young looking"
- More available
- Risk of complications in irradiated field
- OR time including mastectomy 2 h expander, 2,5 h if ADM
- In hospital 1-2 days
- Comoplications – minor ca 20% (17-53%). Re-op 5%??? "Reconstructive failure" 2-10%
- Two staged? Costs?

Autologous tissue

- Natural looking breast – "like with like"
- Better if irradiated
- Needs flap experience and techniques
- OR time (incl mastectomy) ca 3-4 h (LD) och 4-6 h (DIEP)
- In hospital 4-6 days
- Complications – minor ca 20-30% (13-28%). Re-op 10%. "Reconstructive failure" ca 1-2%
- One stage? Costs?

Matros et al PRS 2015, Colwell et al, PRS 2014, Isern et al 2011, Eriksen et al 2011, Chen et al PRS 2009 , Hallberg et al J Plast Surg Hand Surg 2018



Moberg et al 2018, [J Plast Surg Hand Surg.](#)
Bletsis et al Ann Plast Surg 2018.



Ischemic and congested free flap



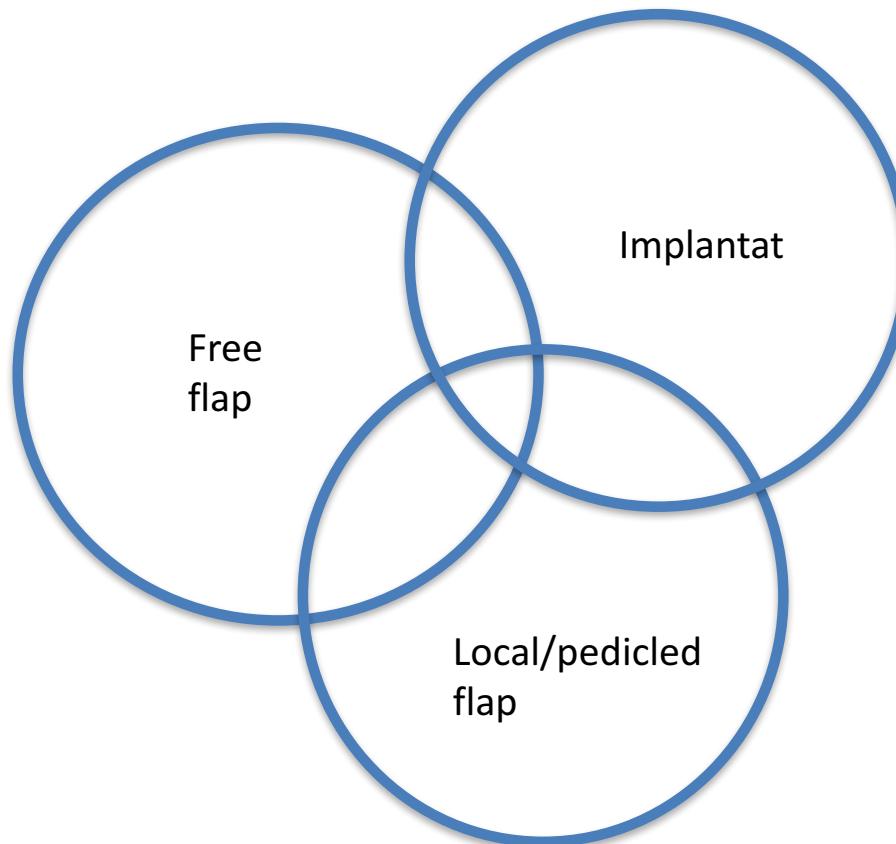


“I hope it’s an Iphone.....”



[Hallberg et al](#) Benefits and risks with acellular dermal matrix (ADM) and mesh support in immediate breast reconstruction: a systematic review and meta-analysis.
[J Plast Surg Hand Surg. 2018](#)

Reconstructive alternatives





KEEP
CALM
AND
OPTIMISE



Maria Mani, MD, PhD
Associate Professor, Consultant Plastic Surgeon
Director of Microsurgery
Uppsala University Hospital
Uppsala, Sweden
maria.mani@surgsci.uu.se

Bröstrekonstruktioner & onkoplastik

Inbjudan till video/mobil rond

Har Du som läkare i regionen något bröstrekonstruktionsfall Du vill diskutera med plastikkirurg och bröstkirurg på Akademiska sjukhuset är Du välkommen att träffa oss via video eller skype.

Ring 103183@join.lul.se från video eller skype
eller från mobil 018-6116900/Call-ID: 103183#

Torsdagar ojämna veckor kl 8.00-8.15

Vid frågor:

018-611 54 27; Åsa Wiberg
Kontaktsjuksköterska
Plastikkirurgmottagningen, Akademiska sjukhuset
asa.wiberg@akademiska.se

maria.rydevik.mani@akademiska.se /018-611 04 71

