# Tumescent Mastectomy


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# Goal of the mastectomy

- Oncologic safety - #1!
  - Adequate resection of all breast parenchyma
- Minimum of complications – adequate blood perfusion
  - Avoidance of postponing possible adjuvant therapy
  - Ensure quick recovery
- Optimized aesthetic  result – adequate fat coverage
  - In simple mastectomy
  - In mastectomy + breast
  - The thicker the subcutaneous

# Oncologic safety

- The right dissection plane?!

- Profound – deep fascia over the pectoral muscle

- Concerns in interest
  - Superficial margins
  - Periphery boundaries

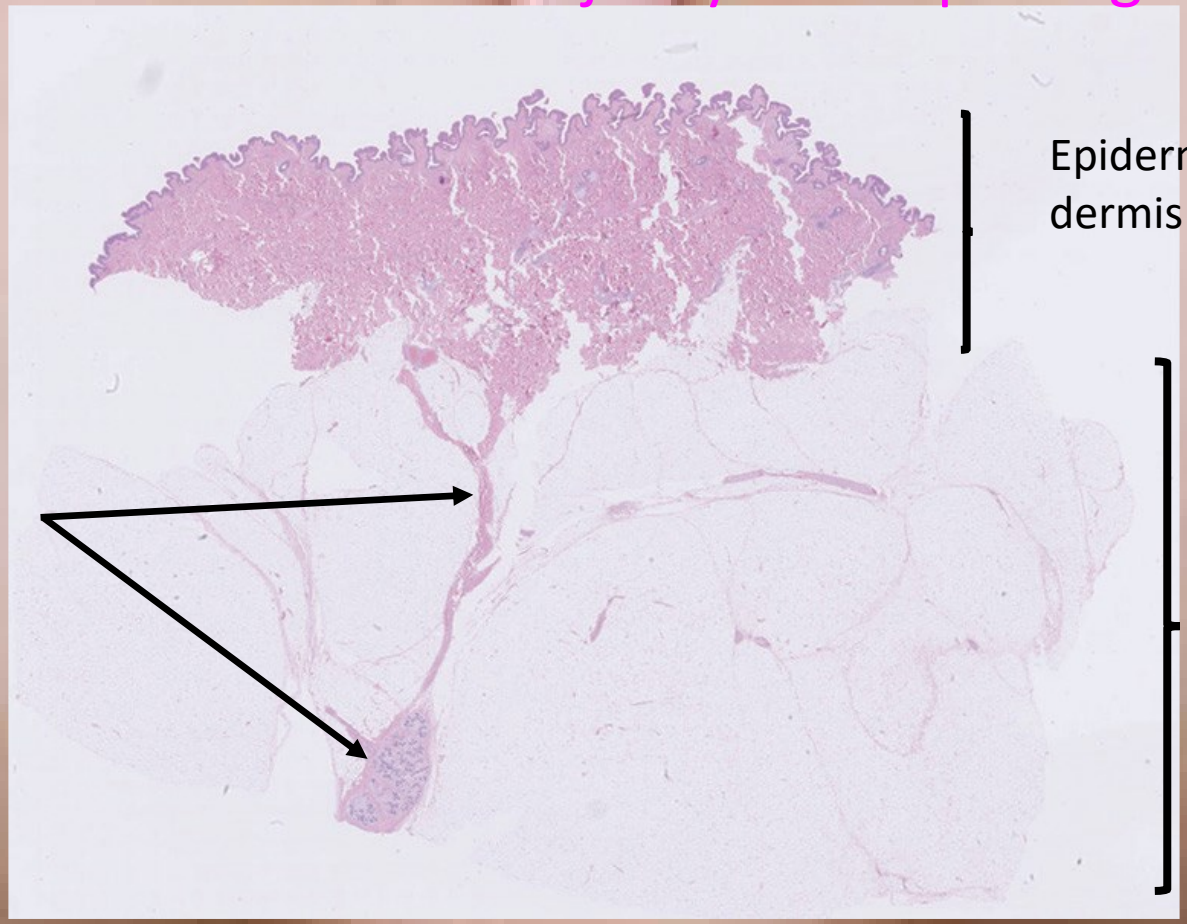
- Tumescence helps identify parenchyma and therefore meets the concerns above.

# Breast skin flap

-from a breast reduction specimen

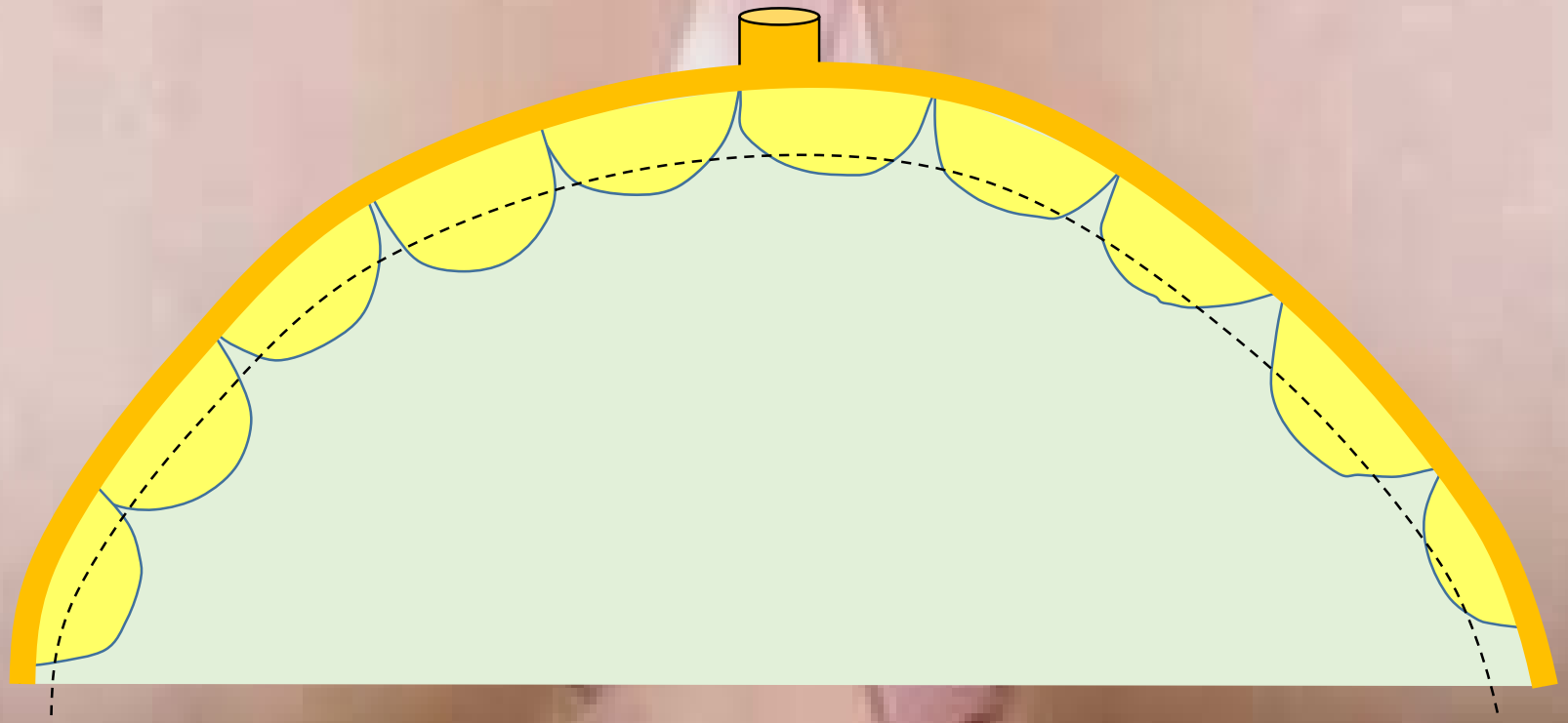
Removing all breast tissue

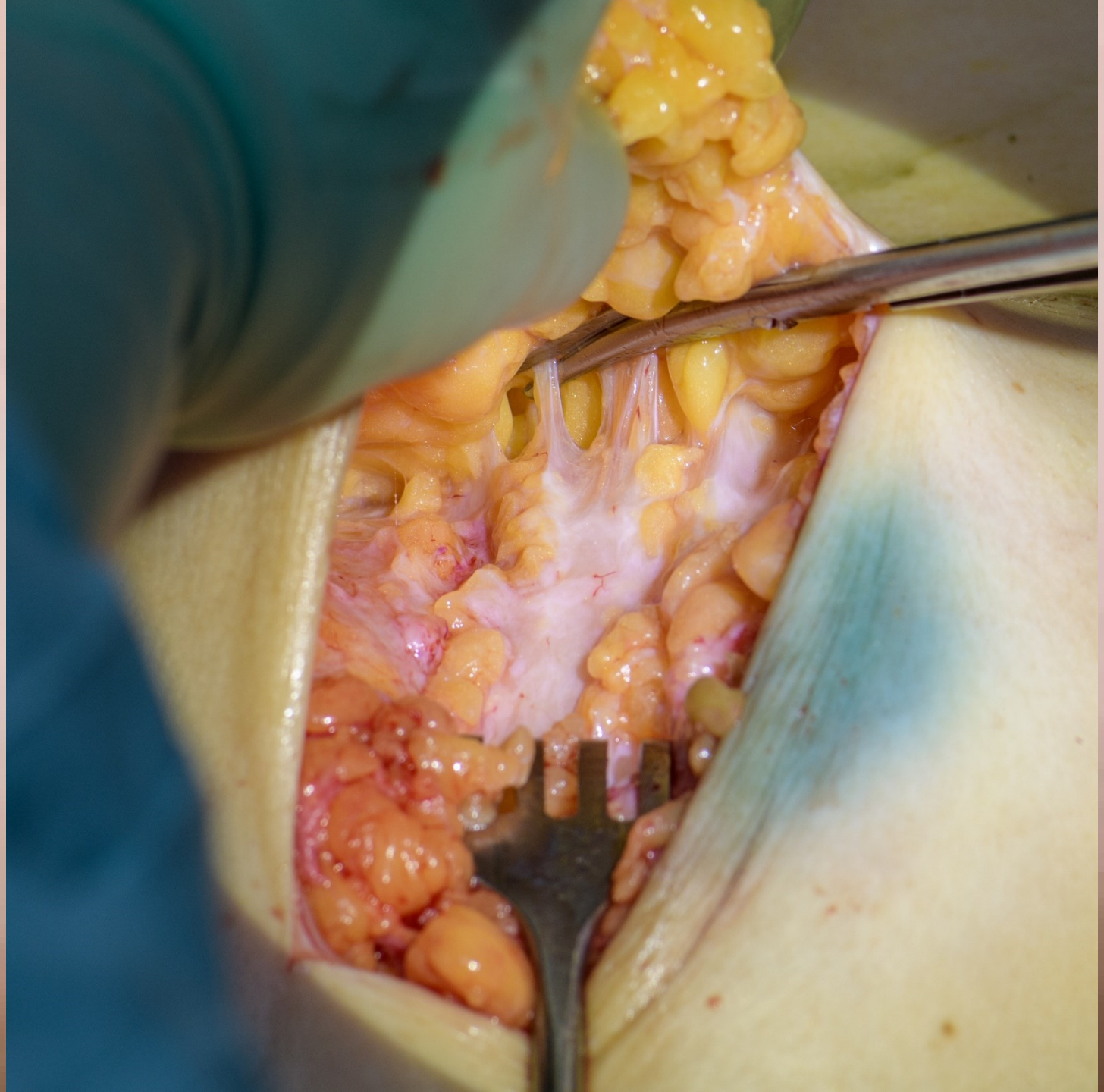
-implies removal of the majority of Coopers ligaments




The figure is kindly supplied by AMB Jylling (Odense University Hospital)

# Keep the fatty tissue – remove all glandular tissue





# Tumescent mastectomy

- Infiltration with
  - 1 liter Saline + 1 ml epinephrine
- Dissection using Meztenbaum scissors
- Blind / Under visual guidance
- 2 different movements:
  - Blunt dissection to separate the fat lobules from the glandular tissue
  - Cutting movement of the ligaments

# Tumescent mastectomy

Visualized Surgery

## Identifying the dissection plane for mastectomy—description and visualization of our technique

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**Abstract:** In this visualized surgery paper, we present our experience identifying the optimal dissection plane in nipple-sparing mastectomy using hydrodissection through an inframammary incision. The surgical technique comprises of preoperative magnetic resonance imaging (MRI) aiming to assess the thickness and expected quality of the mastectomy flaps, an inframammary incision, and hydrodissection to assist the surgeon in identifying the optimal dissection plane. This surgical method results in an adequate resection of breast parenchyma to obtain the best oncological outcome, while retaining the maximum amount of subcutaneous adipose tissue on the skin flaps to achieve a superior aesthetic result resembling the natural breast. The mastectomy flap thickness and quality can then be assessed prior to an immediate reconstruction.

**Keywords:** Mastectomy; surgical technique; immediate breast reconstruction; dissection plane

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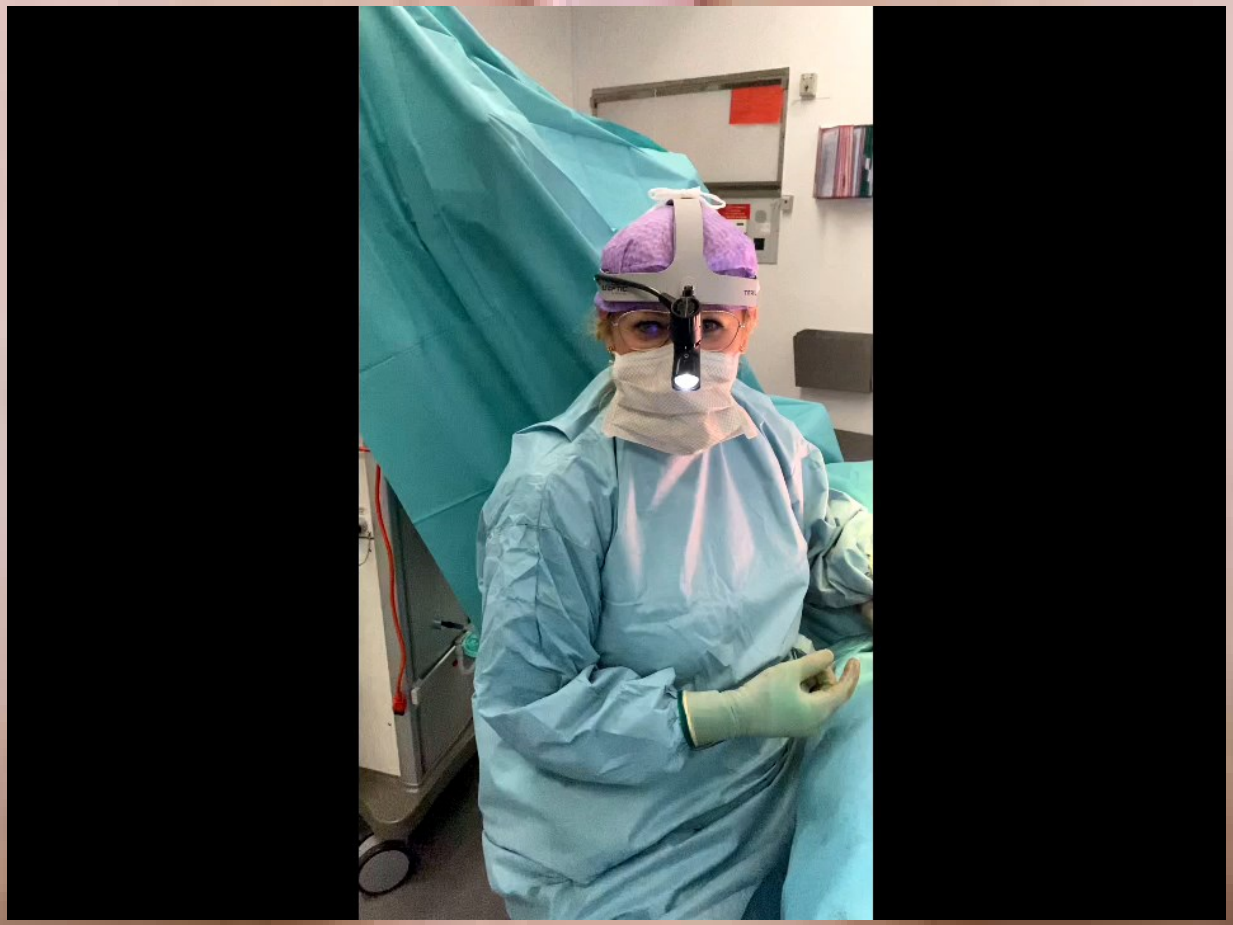
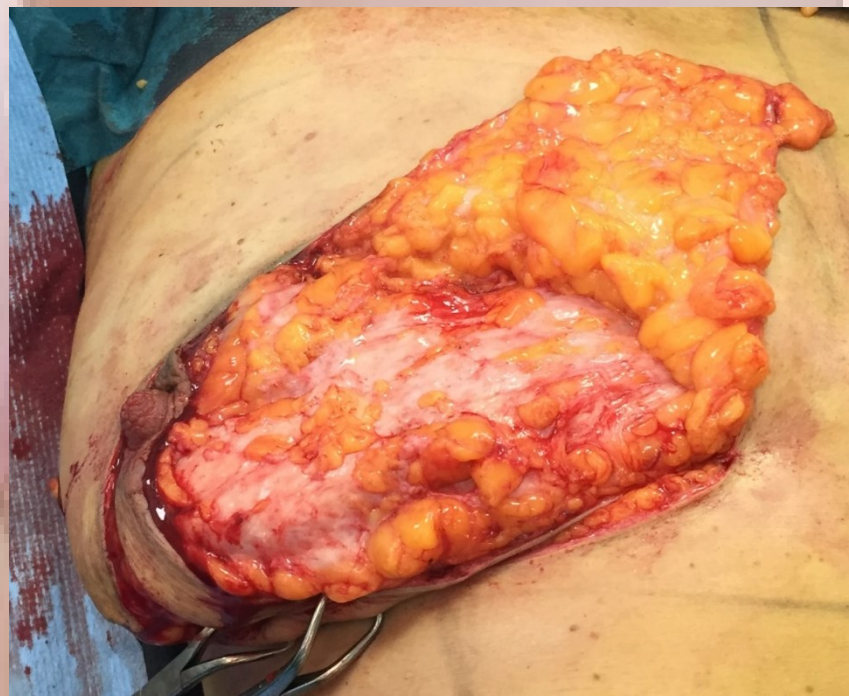
# Buy yourself a surgical head light!



# Dissection under visual guidance

## with tumescent mastectomy

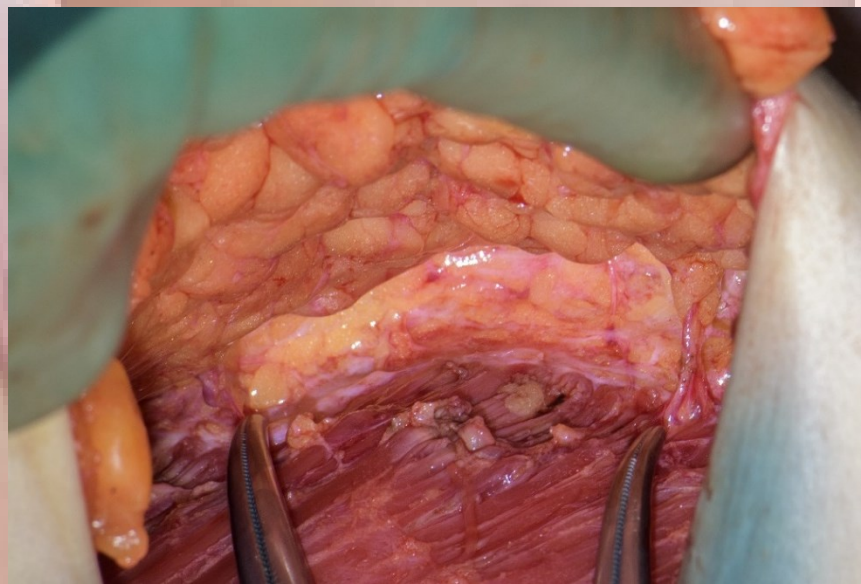
- Advantage #1 – oncologic safety
  - The epinephrine solution enhances the visual differentiation of glandular tissue
  - Ensures optimal removal of the breast tissue in
    - Superficial margins
    - Peripheral breast boundaries
    - Coopers ligaments.



# Dissection under visual guidance

## with tumescent mastectomy

- Advantage #2 – less complications
  - Atraumatic technique in the avascular dissection plane
  - Parasternal perforators is easier identified
- Ensures optimal blood flow in the skin flaps
- Reduces risk of
  - Necrosis,
  - Wound dehiscence
  - Infections



# The first 165 breast reconstructions

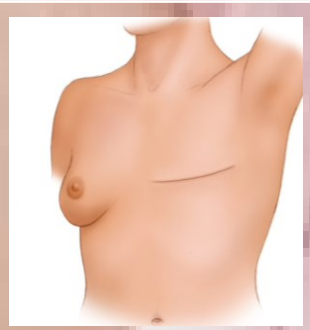
**6 expanders + 159 permanent implants**

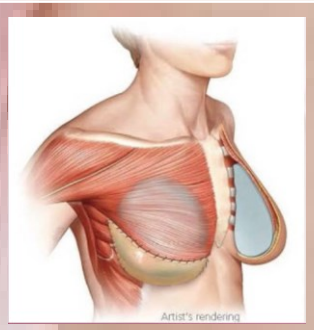
**Co-morbidities** : (BMI > 35), smoking, mb. Crohn, colitis ulcerosa, Hodkins lymfom, cardiel disease and pt. In anticoagulant therapy

**Outcome:** Complications with different mesh

- Explantation **9 (5.4%)**
- Loss of reconstruction **4 (2.4%)**

# Time to adjuvant chemotherapy






| | Mastectomy without reconstruction | Mastectomy with reconstruction | P | HR (95% CL) |
|---|---|---|---|---|
| **No. of patients** | 59 | 20 | | |
| **Time to adjuvant chemotherapy Mean (range)** | 32 days (17-70) | 33 days (21-52) | 0.864 | 1.06 (0.546;2.055) |

NOT PROLONGED

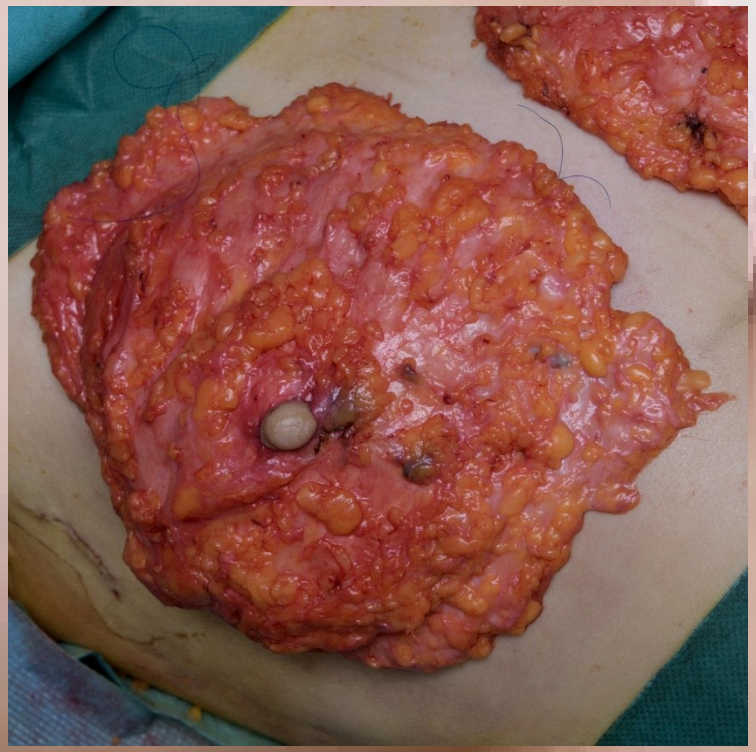
# Dissection under visual guidance

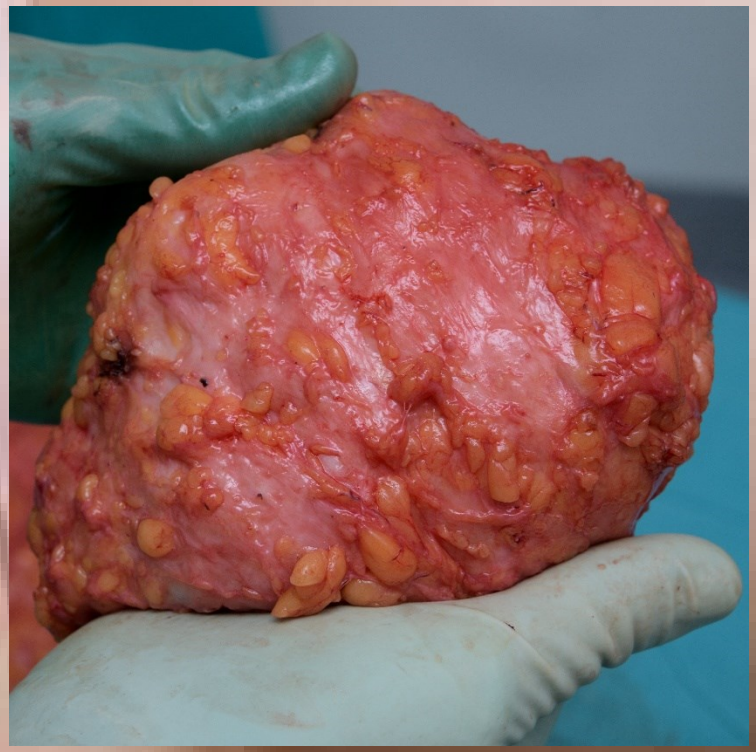
## with tumescent mastectomy

- Advantage #3 – superior cosmetics
  - The epinephrine solution enhances the visual differentiation of glandular tissue and fatty tissue
- Preservation of subcutaneous fatty tissue in the skin flap
- Inducing
  - More softer natural looking cosmetic result
  - Less visualization of implant edges
  - Longer distance from the skin surface to the implant

# Regardless mastectomy technique

- Every surgeon should evaluate margins in cooperation with the pathologist.





# Thanks to my team at OUH

# Advertisement

- https://www.meducator.dk/masterclass

- Masterclass in oncoplastic surgery 7-8 sept.