

Breast Reconstruction Following Mastectomy and the Effects of Postmastectomy Radiation

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University of Nebraska
Medical Center



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Implant Reconstruction vs. Autologous Reconstruction

Advantages:

- Short operation time
- Decreased Early postoperative complication rate
- Donor site morbidity
- Short hospital stay → resulting in low treatment costs.

The limitations:

- Capsular contracture
- Implant failure- Rupture/Infection/Exposure
- Unilateral reconstruction
- Need for revision surgery



Implant Based Reconstruction

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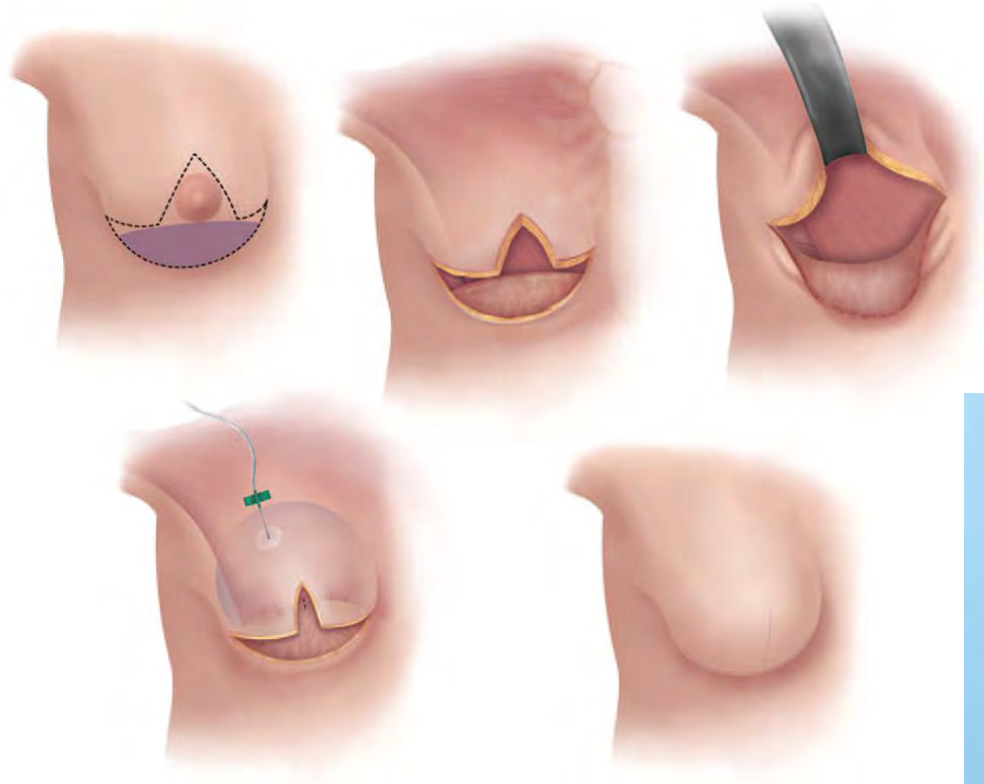


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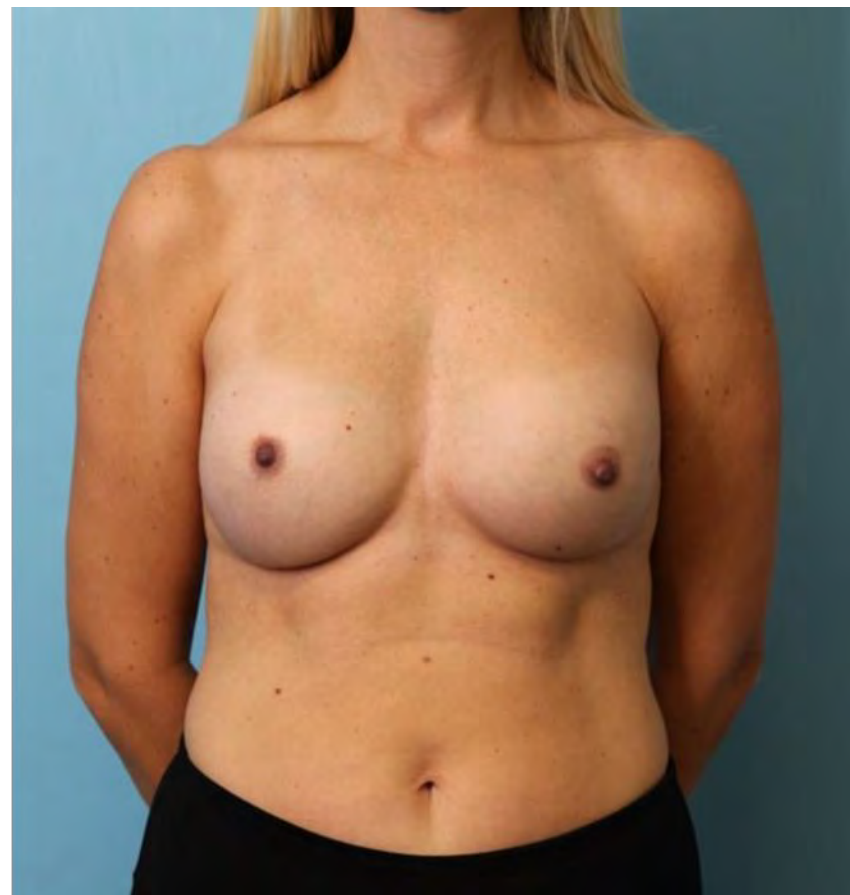
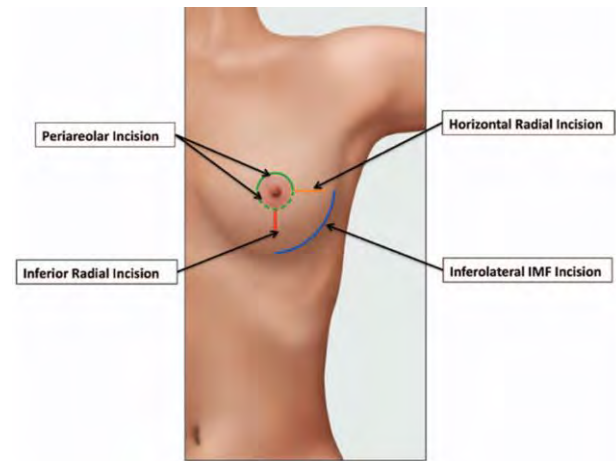
Skin Sparing Mastectomy Incision



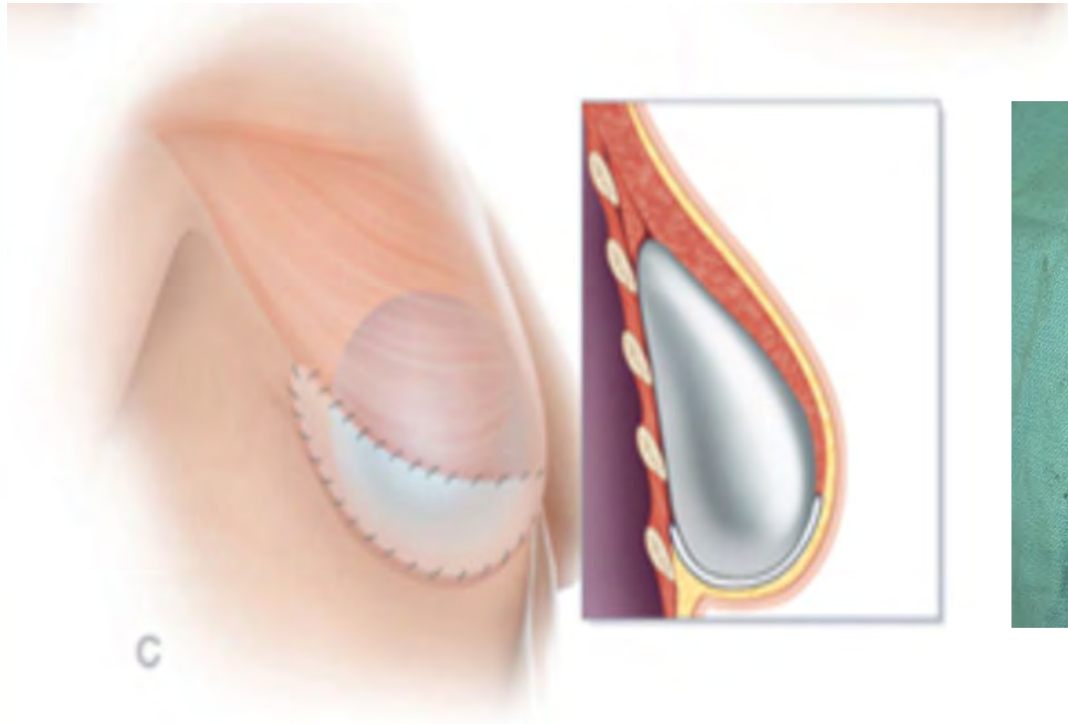
Skin Sparing Mastectomy Incision



Nipple Sparing Mastectomy



Pocket location: Retropectoral



Pocket Location: PrePectoral

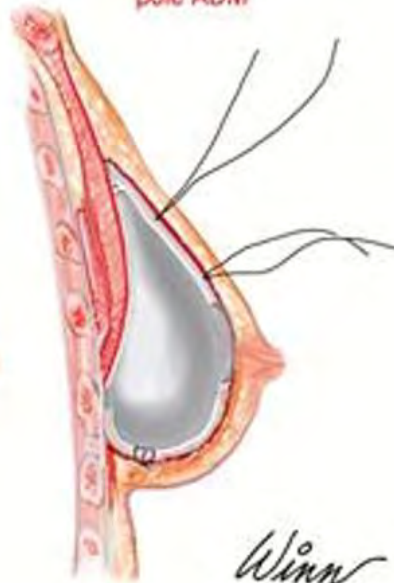
Pre-Pectoral
Partial ADM
with anterior
coverage



Pre-Pectoral
Full ADM
with anterior
and posterior
coverage



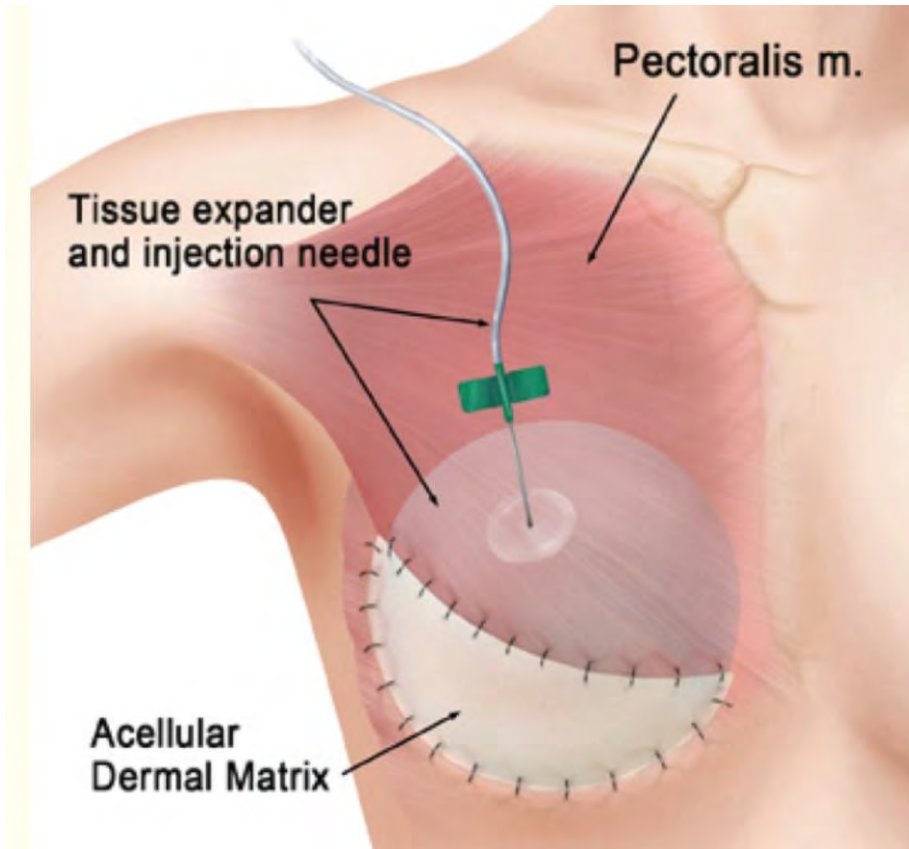
Parachute
Sutures
of upper pole
ADM / keeping
original lower
pole ADM



Winn



1st Stage: Tissue Expander



Second Stage: Silicone Implant



Round Smooth Implant



Textured Anatomic (Teardrop) Implant



Direct to Implant



Autologous Breast Reconstruction

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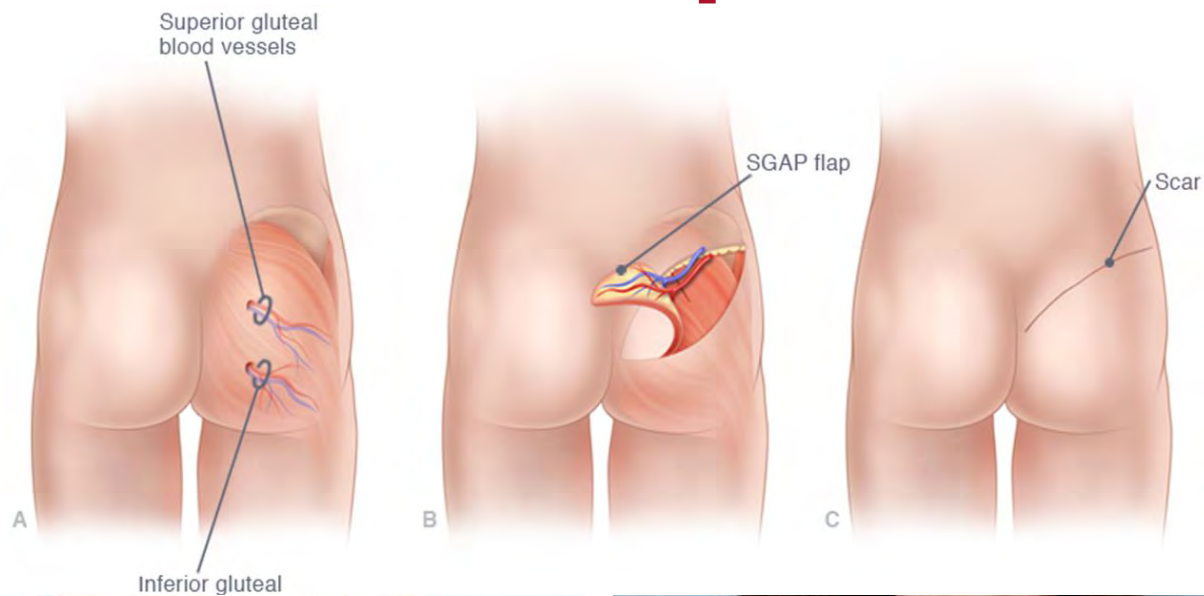


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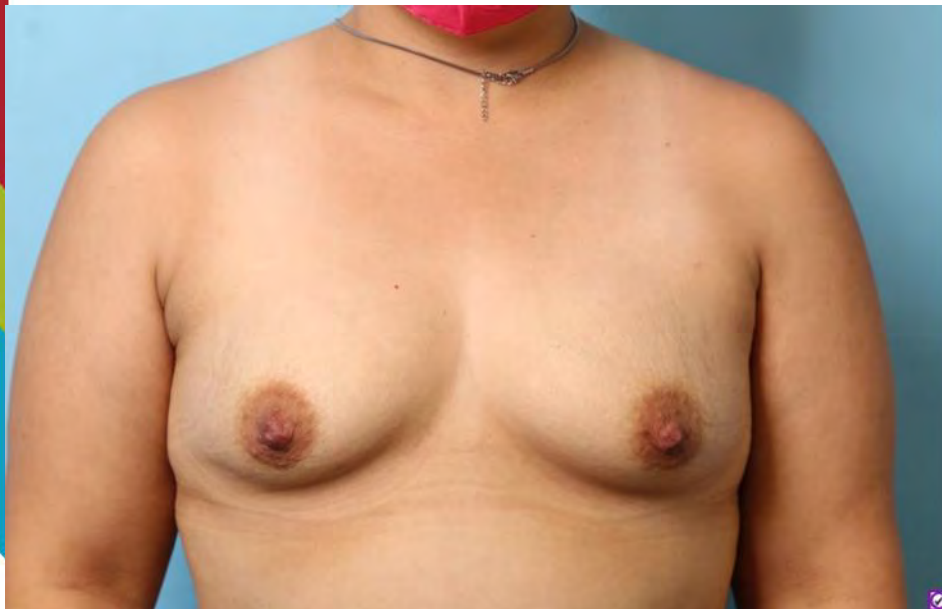
Pedicle Flap: Latissimus Dorsi Flap



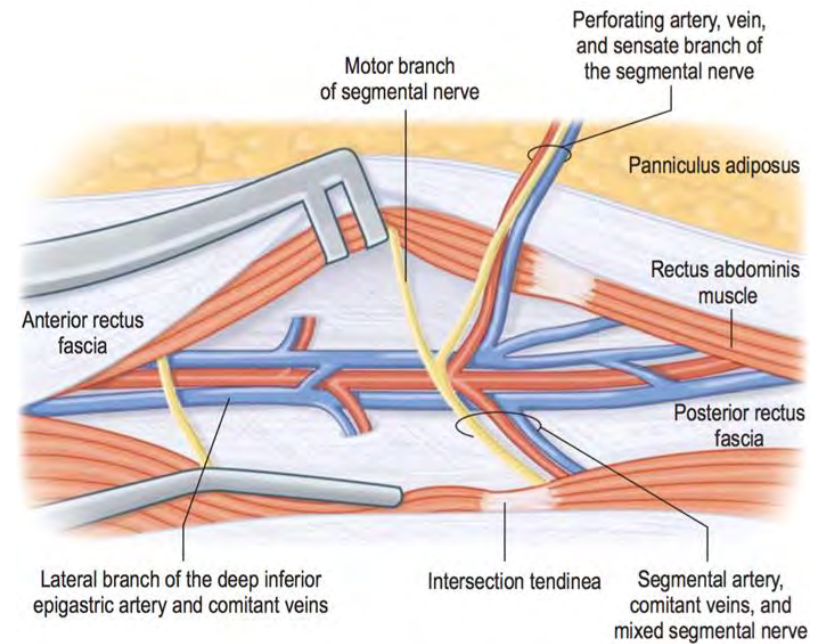
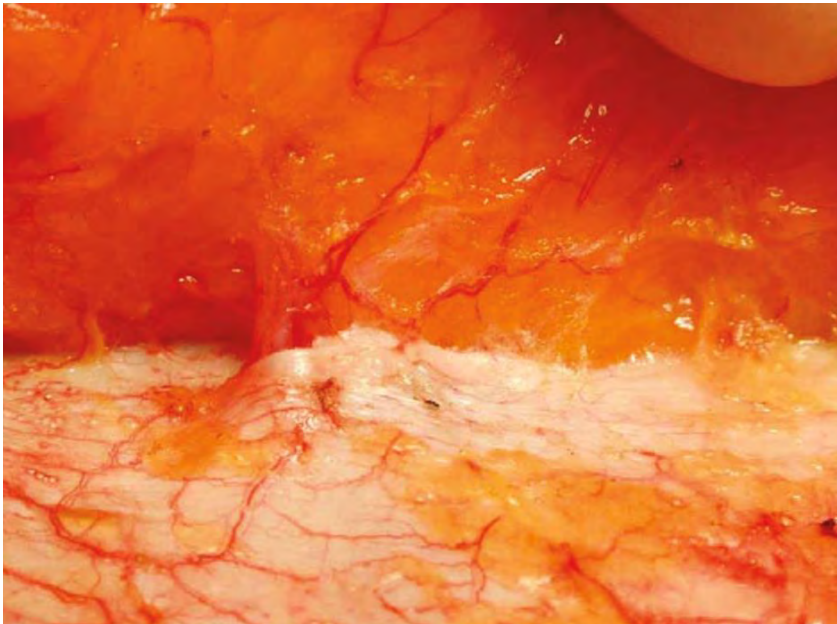
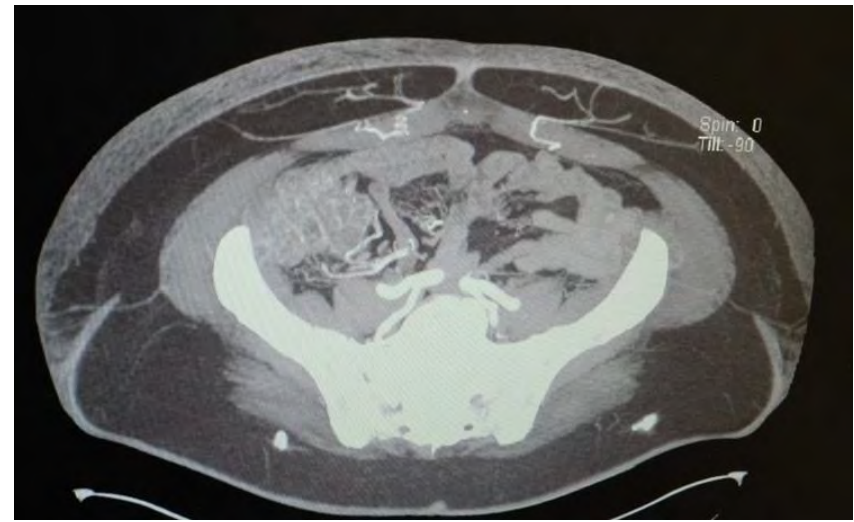
SGAP Free Flap



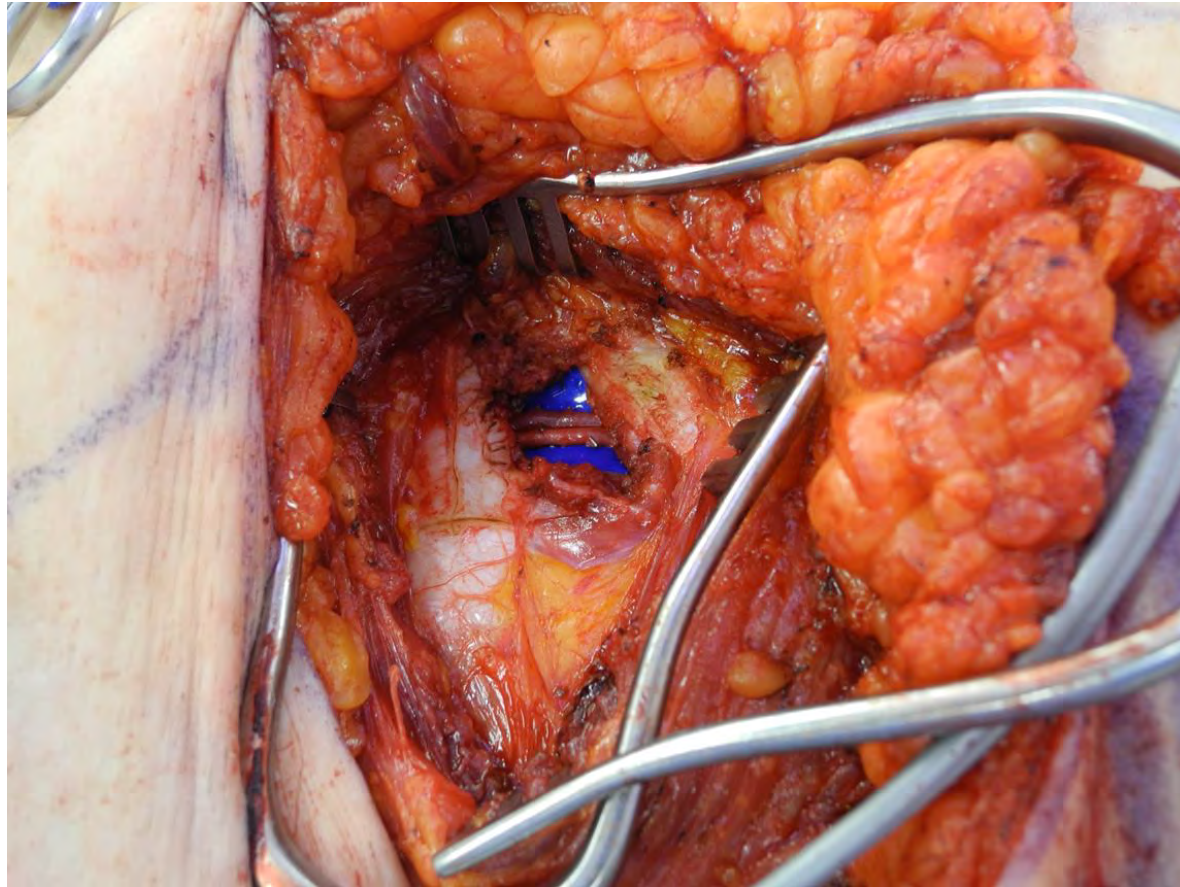
DIEP Flap



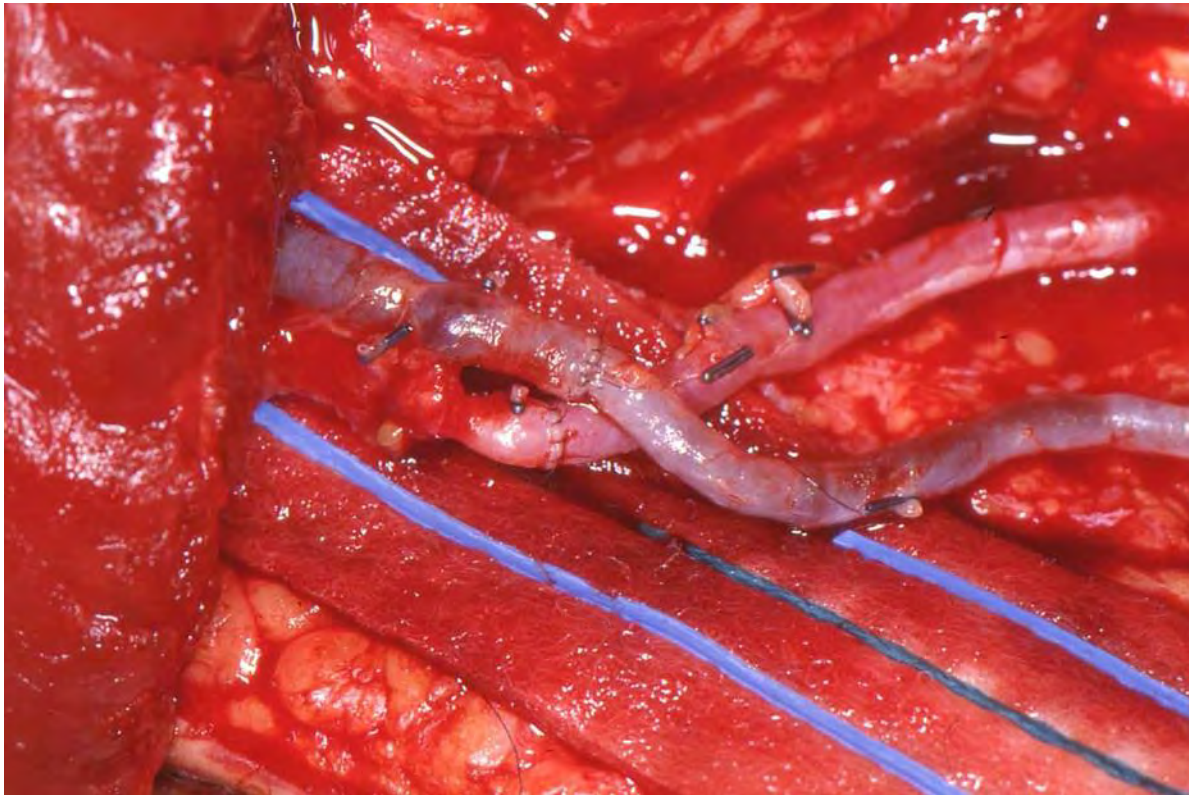
DIEP Flap



DIEP Flap



DIEP FLAP



Implant Based Reconstruction and PMRT

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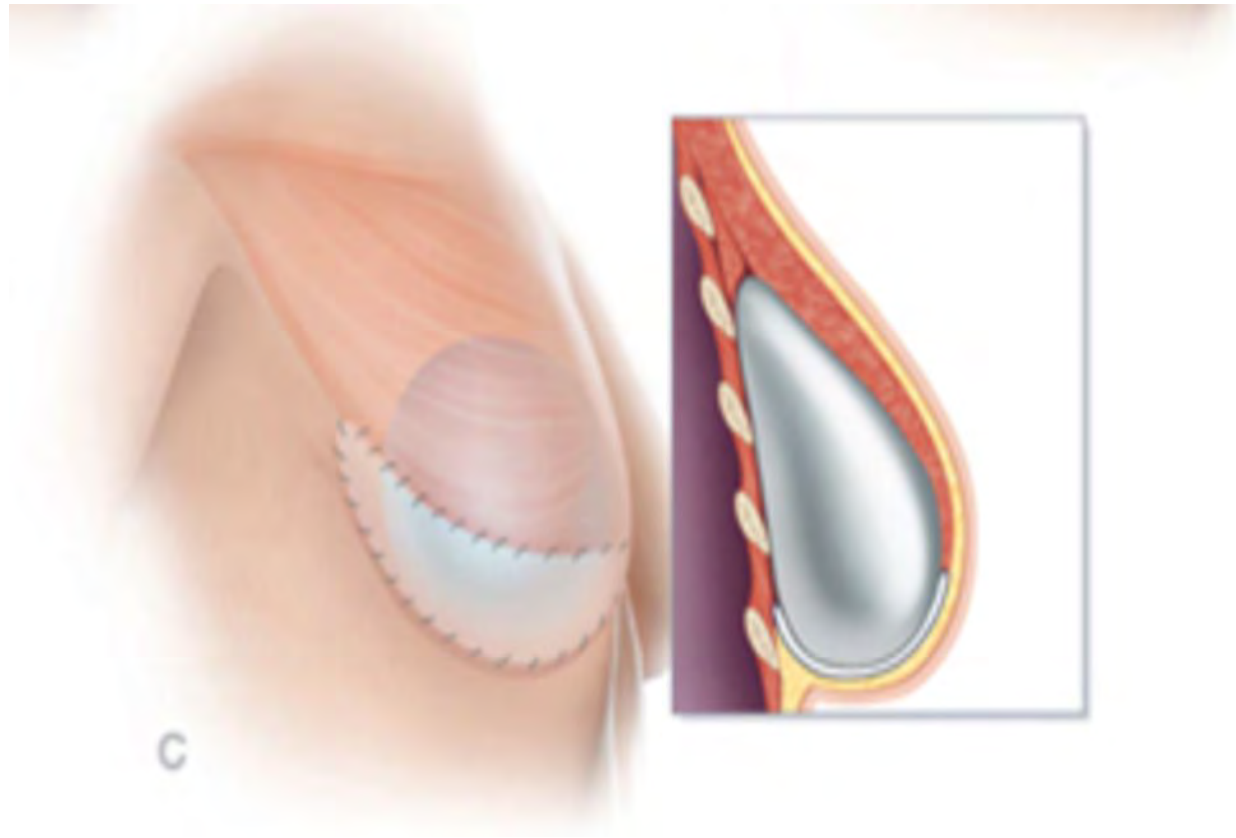
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Implant Based Breast Reconstruction and PMRT

- Timing of Breast Reconstruction following radiation therapy
- Two Stage vs. Direct to Implant
- Pocket Placement



PMRT and Pocket Placement

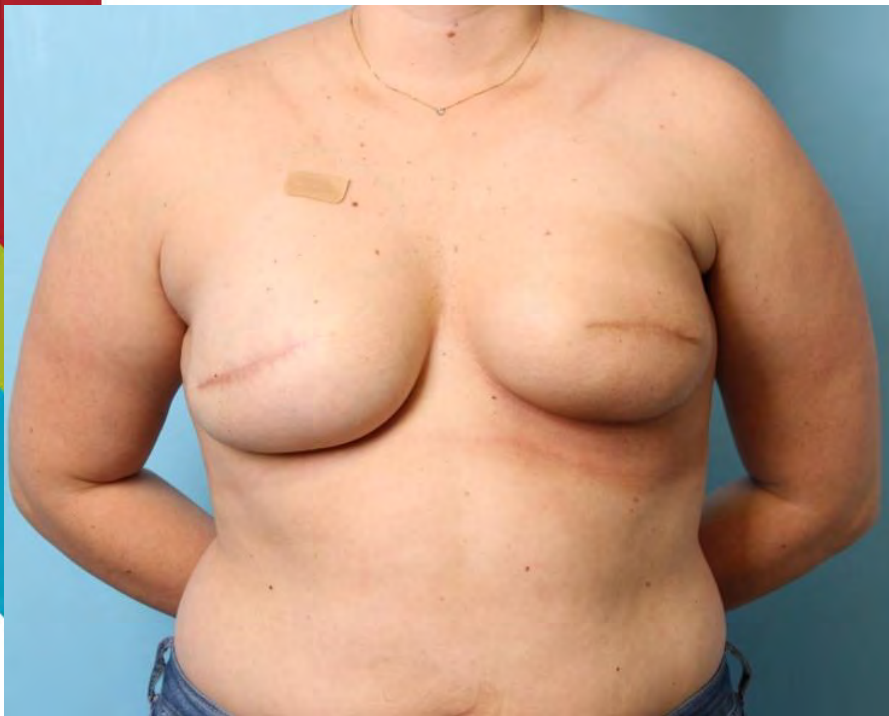


Retropectoral Implant





Retropectoral Implant





PMRT and Pocket Placement

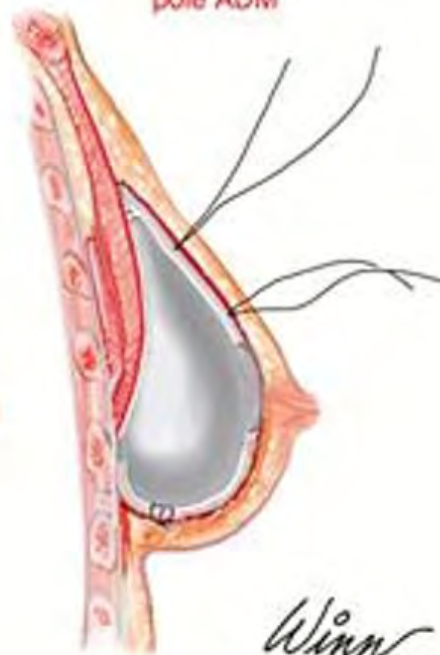
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Sutures
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Winn







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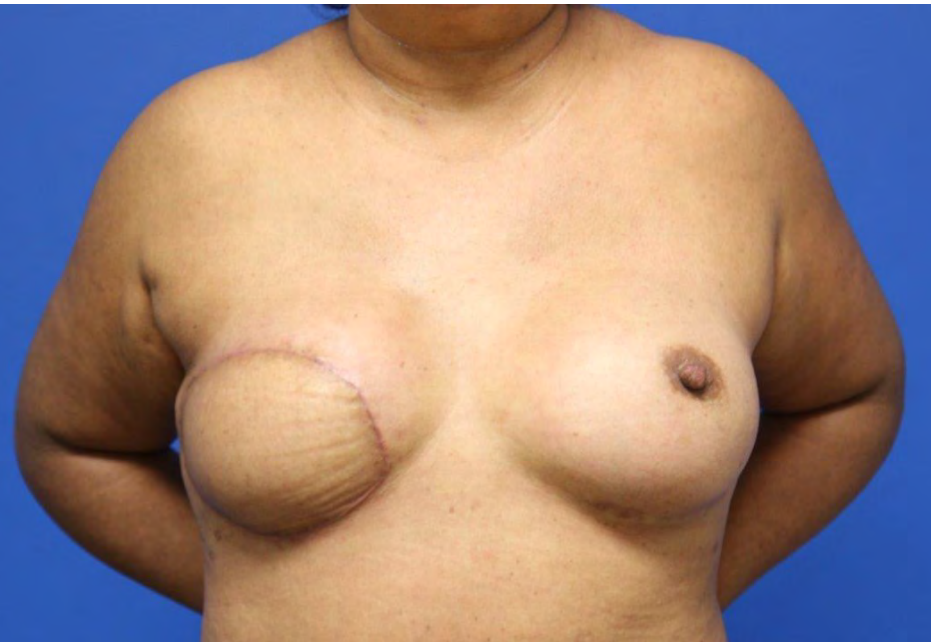
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Autologous Reconstruction and PRMT

- Timing of Reconstruction
- Delayed Reconstruction vs. Immediate Reconstruction



Delayed Reconstruction



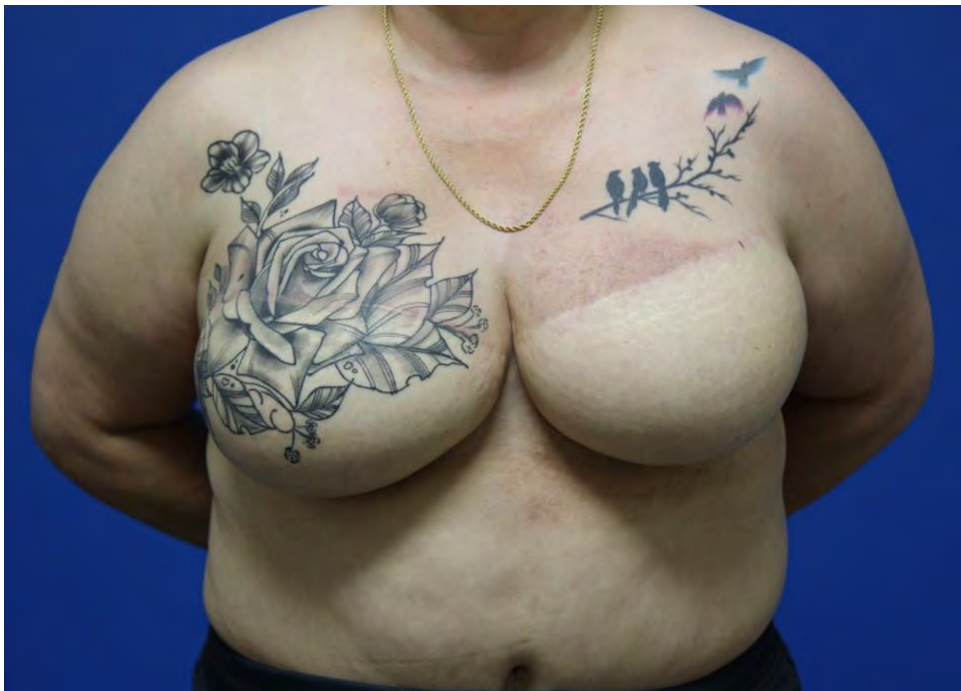
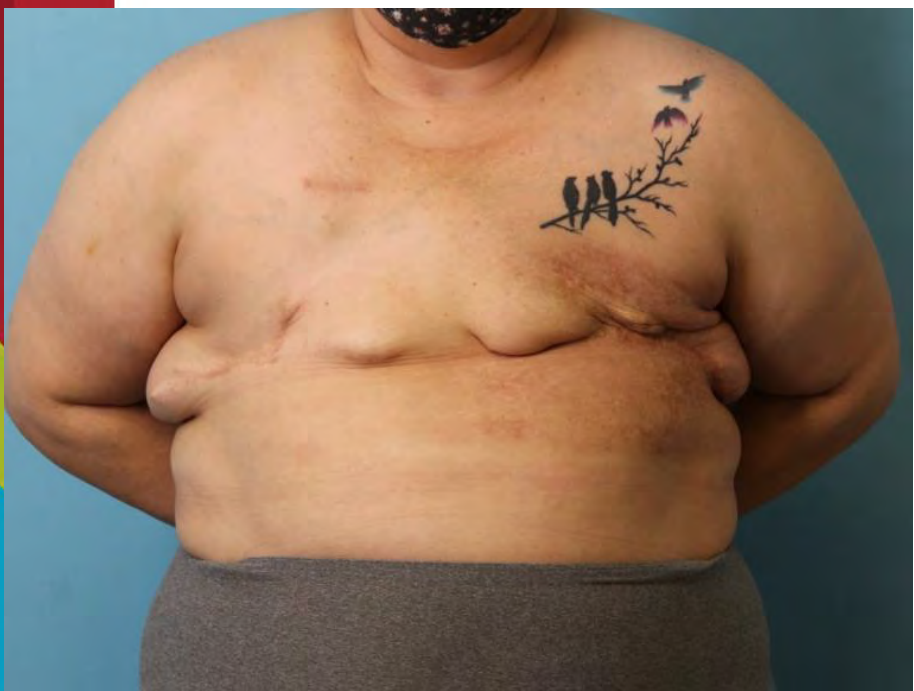
Delayed Reconstruction



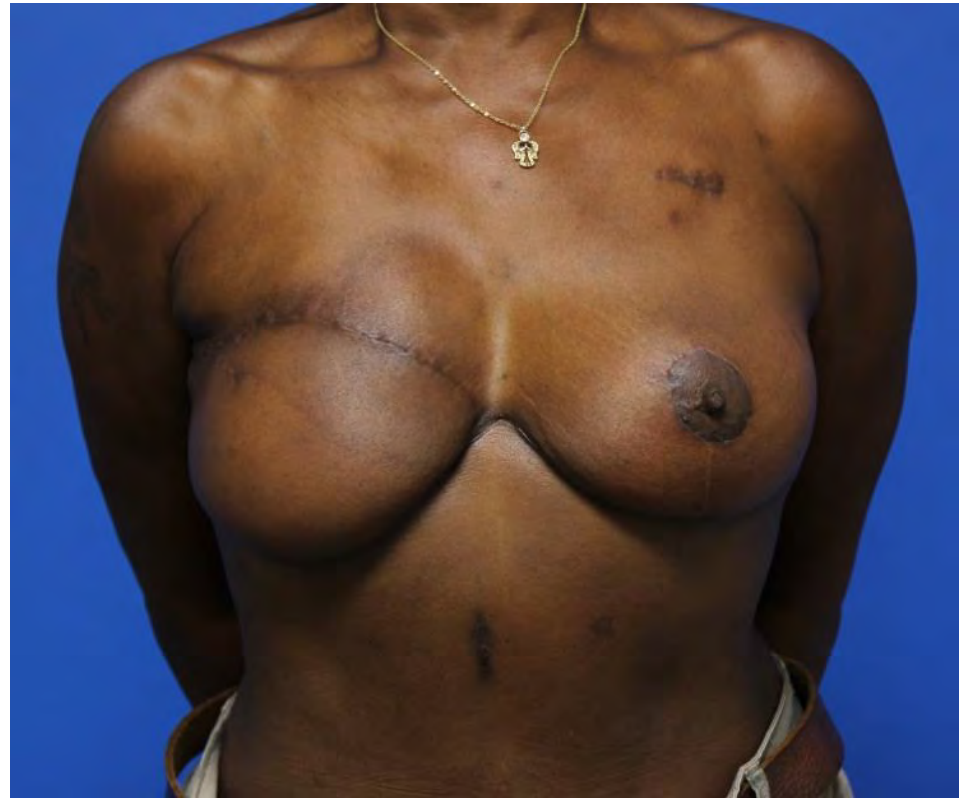
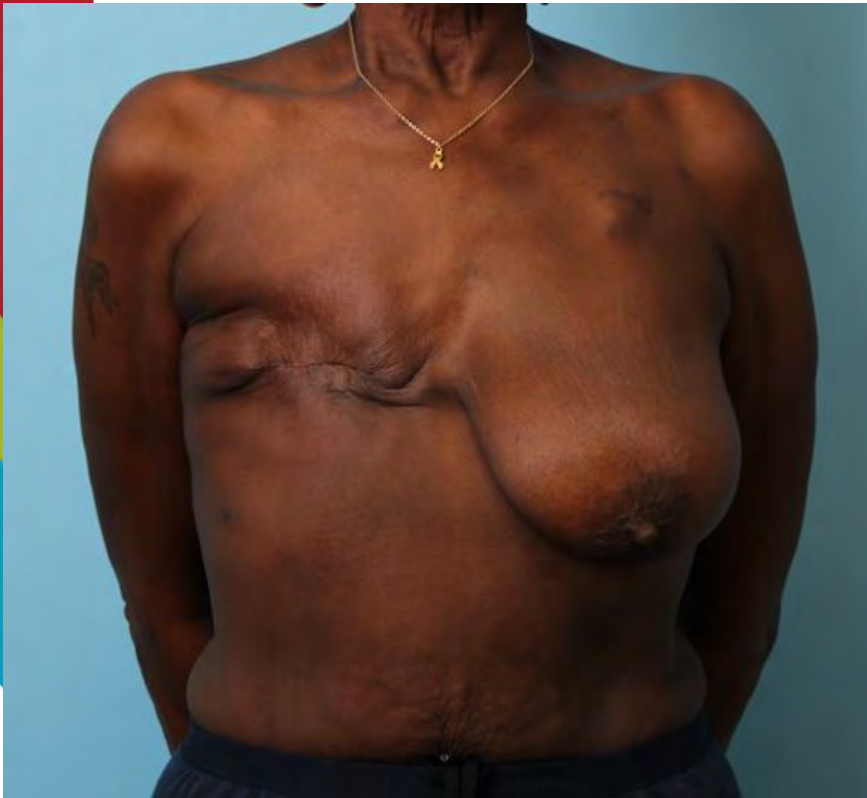
Delayed Reconstruction



Delayed Reconstruction



Delayed Reconstruction

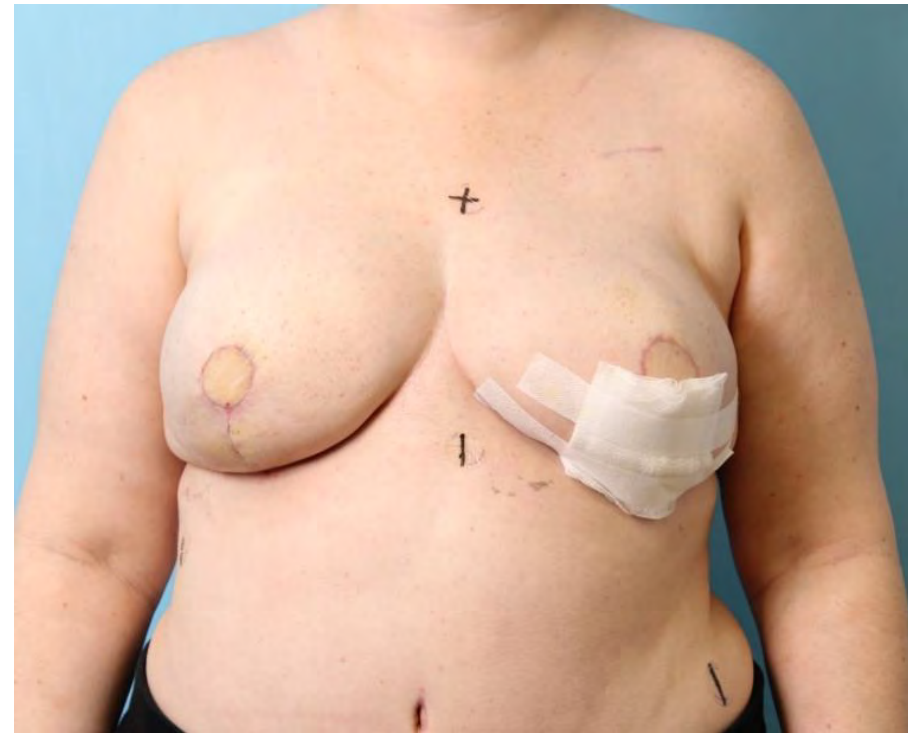


Delayed Reconstruction





Immediate Reconstruction





Immediate Reconstruction





Immediate Reconstruction





Summary

- Autologous reconstruction is the gold standard in patients receiving PMRT
- Implant based reconstruction → Prepectoral
- 2 stage vs. 1 stage



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