

Nipple Sensation-Sparing Chest Masculinization Surgery

Patient Guide

What is it?

Usually, when patients undergo chest masculinization surgery (double mastectomy), the resulting sensation in the chest wall can feel numb in places, and the nipples can lose sensitivity. The flat aesthetic is there, but not the feeling. The nipple sensation-sparing technique is an additional step to a chest masculinization surgery that preserves the patient's own nerves so they can still feel their chest afterward.

Technique Overview

- At least 2-3 nerves are traced and removed from the breast at the beginning of the operation. Once the breast tissues are removed, those nerves are re-attached to the chest and threaded through the nipple.
- The procedure can be done in one operation and only adds about 30 minutes to the operation.
- Post-operative differences include some mild itching or burning sensations while the nerves reattach, but these will usually go away within a few months.

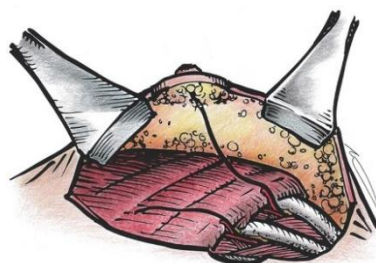
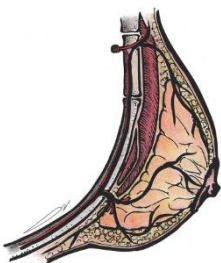
Benefits

To know the movement of your body is to inhabit it.

- Preserved sensation leads to less accidental injury to the chest
- Patients report a better sense of connection with their body than those who did not have nipple sensation-sparing surgeries
- Regrafting nerves may actually improve sensation for patients with larger pre-op breast volume

Drawbacks

- Requires the nipple to be spared or free-grafted as a graft point for the transected nerves
- May still result in loss of sensation in the chest.
- Many physical and mental factors affect the approach taken for all bilateral mastectomies, so it is possible that the NSS approach won't be the best option.
- Patients who are offered the technique may want to opt for a different approach based on their desired outcomes.



*Illustration by Phil Brazio,
MD.*

*Plastic and Reconstructive
Surgery – Global
Open8(3):e2719, March 2020.*

☒ Patient Candidacy

- ☐ Healthy nerves:
 - ☐ Not currently in or expecting to have chemotherapy
 - ☐ Less than 65 years old
 - ☐ Good blood flow to breast area
 - ☐ Minimal comorbidities
- ☐ Small to large pre-op breast volume (not extra-large or broad-based breasts)
- ☐ Little to no breast reconstruction needed
- ☐ *Short nerve stumps or inadequate nerve length – only known during surgery

Further Reading:

- “Gender-Affirming Sensation-Preserving Surgery” from Peled Surgery - <https://peledsurgery.com/home-alternate-1/gender-affirming/>
- Remy, K., et al. (2024). Targeted Reinnervation During Gender-Affirming Mastectomy and Restoration of Sensation. *JAMA Network Open*, 7(11), e2446782. <https://doi.org/10.1001/jamanetworkopen.2024.46782>
- Rochlin, D. H., et al. (2020). Immediate Targeted Nipple–Areolar Complex Reinnervation: Improving Outcomes in Gender-affirming Mastectomy. *Plastic & Recon Surg*, 8(3), e2719. <https://doi.org/10.1097/GOX.0000000000002719>

Additional Consultation Notes:

Consulting Surgeon: _____

Consultation Date: ____ / ____ / ____

Contact: _____