

A New Technique in Nipple Reconstruction: an Innovated Nipple Protector Following Two-Stage Modified Top-Hat Flap with Auricular Cartilage Struts

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Disclosure of Relevant Financial Interests

- Nothing to disclose

Inform Consent of Photo Release

- All patients in this presentation granted us permission to use their images for the academic purpose

Objective of The Study

- Build up a method to measure the neo-nipple accurately
- Introduce a new technique in nipple reconstruction:
 - Two-Stage Modified Top-Hat Flap with Auricular Cartilage Struts
 - Molded nipple protector
- Test the efficacy of the new technique
- Calculate the attrition rate of the neo-nipple

Materials and Methods

- 24 nipple reconstructions during 2010-2012 by two-stage modified top hat flap with auricular cartilage graft
- Following breast reconstruction in 14 autologous tissue and 10 expander-implant reconstructions
- Fitted nipple protector for 6 months

Two-stage modified top hat flap with auricular cartilage graft

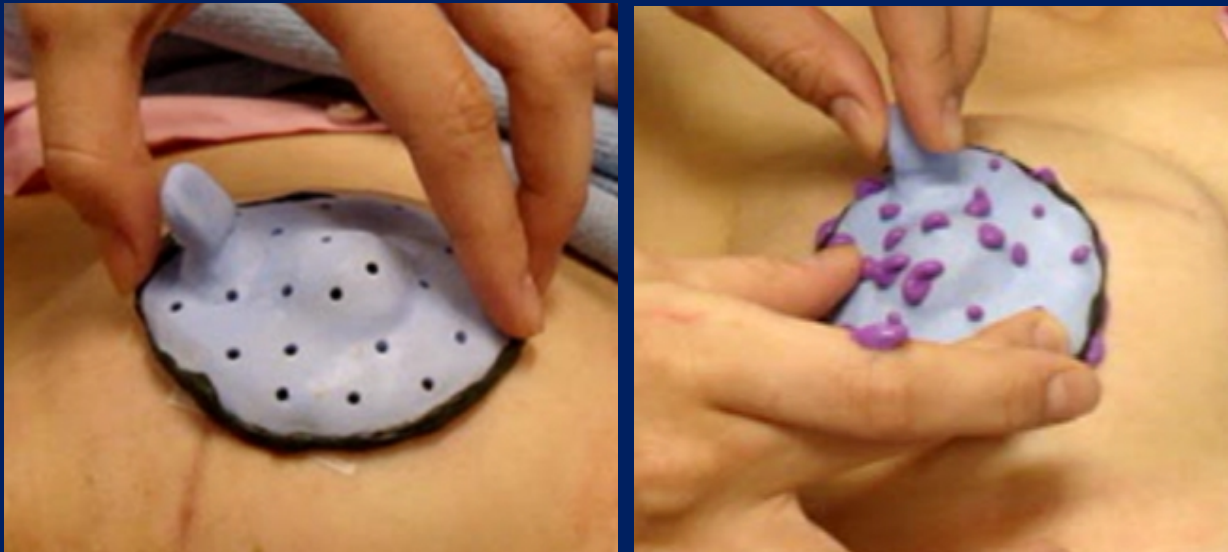
- First stage
 - Bury cartilage struts (usually 6 in number) from ear in the lower dermis of delayed skin flaps
- Second stage
 - After 3 weeks, elevate the delayed skin flaps and the buried cartilage served as supporting columns in the wall of reconstructed nipples

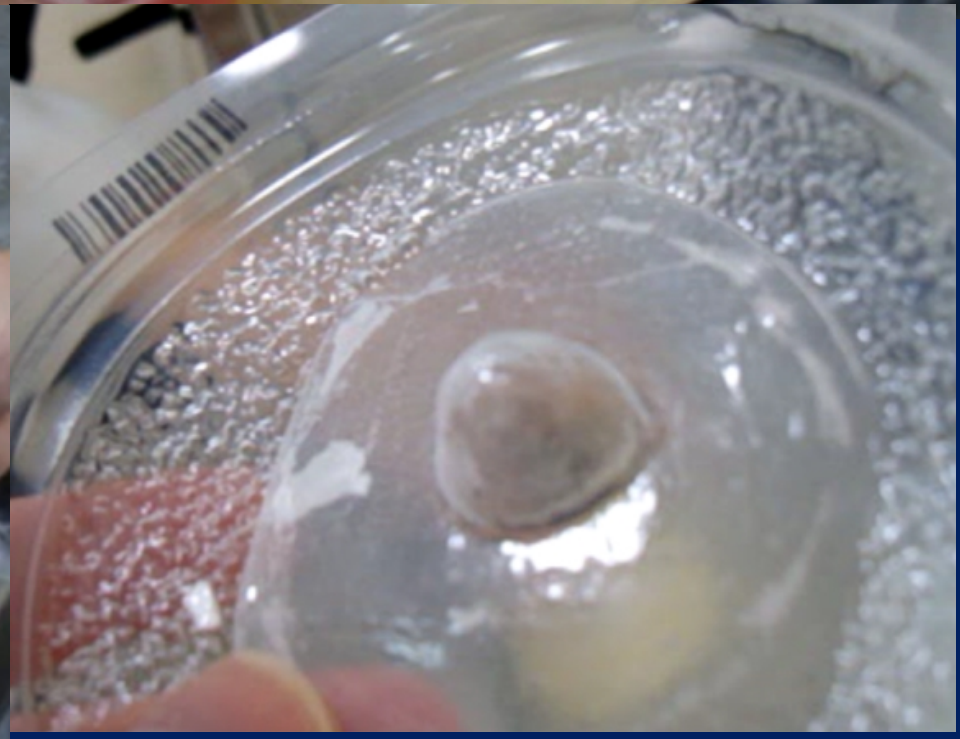
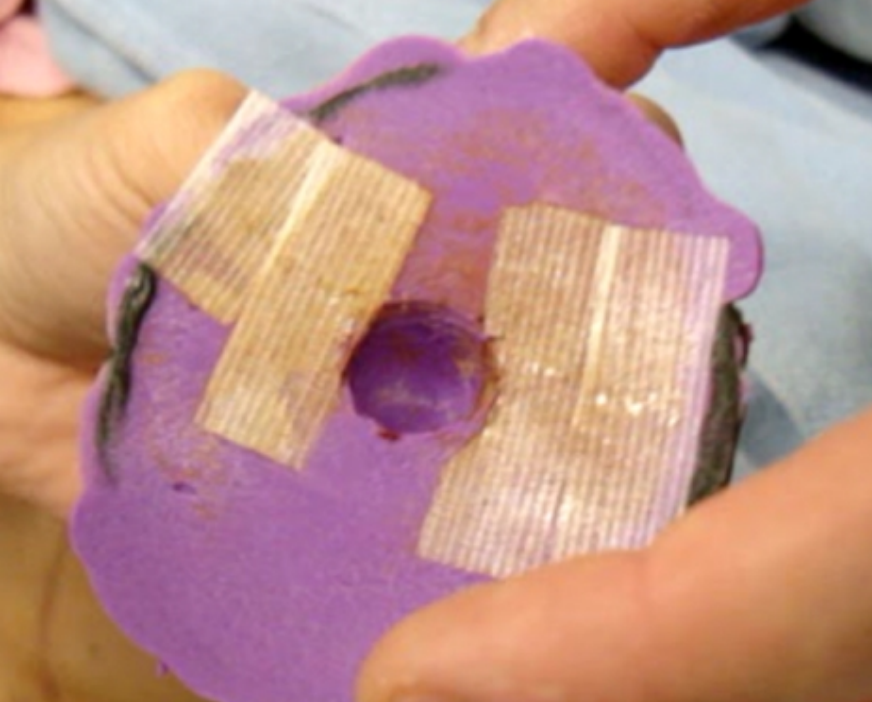
Nipple protector

- After delicate procedures, we produced a transparent, elastic and strong enough to nipple protector against friction and compression
- The nipple protector should be worn for 6 months

Measure the volume of neo-nipple

- In post-operative 1, 3, 6 months
- After delicate procedure, we build a mold of neo-nipple by Copyplast®
- We measure the volume of the mold to get the exact volume of neo-nipple





Results and Conclusions

- All reconstructed nipples were viable
- 25% nipples with partial necrosis
- The shrinkage rate (3 months)
 - 15 to 20% in height
 - 31% to 44% in volume

CONCLUSION

- Provide a new method of nipple reconstruction by modified top-hat flap with auricular cartilage graft
- Provide an nipple protector benefits post-operative wound care and prevent the newly-formed nipple from compression
- Provide an accurate method to measure the neo-nipple

Thank you for your attention!