Shaping Your Future: Understanding Your Options for Breast Reconstruction

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Be empowered…
Knowledge is power.

The more you know, the better prepared you will be to make the right choice.
Our Role

• Is to inform our patients about all of their options and empower them to make their own decision.

• We will make a recommendation, but feel it is important to give women the ability to make this decision based on their individual goals, lifestyle, family, or work.
Every patient is different and the approach to breast reconstruction needs to be individualized.

Identical twins might choose different procedures.
Questions

• Should I reconstruct my breast?
• Am I a candidate?
• When should I have my reconstruction, immediate or delayed?
• How many operations will be needed?
• Will I need surgery on the other breast?
• Will breast reconstruction impact on the ability to detect recurrent or other cancers?
• What are my reconstructive options?
Should I reconstruct my breast?

• Breast reconstruction is optional...you get to choose! We do not believe the breast, or any body part, defines who you are.

• The majority of patients, particularly younger patients, will choose reconstruction if given the option.
Should I reconstruct my breast?

• Women who choose reconstruction note that it:
  – Makes them feel whole.
  – Restores self confidence in their physical appearance.
  – Gives them a sense of control that they didn’t experience with the other parts of their treatment.
  – Brings closure to the physical and emotional struggle of breast cancer.
Am I a candidate?

Most patients are candidates for reconstruction but some conditions may affect reconstruction or which options are available:

- Poor general health
- Poorly controlled diabetes
- Autoimmune disease
- Smoking
- Widely metastatic disease
- Morbid obesity
When should I have my reconstruction, immediate or delayed?

- Immediate – done during the same operation as the mastectomy.
- Delayed – during a separate operation, anytime after mastectomy.
- Depends on tumor size and biology. The underlying issue is radiation.
- Other factors may be related to health, feeling overwhelmed by your diagnosis, or if you are unsure about reconstruction.
What are the advantages of immediate reconstruction?

• Most of the breast skin is preserved.
  – This makes our job easier and can improve results.

• You wake up from surgery with your breast reconstruction under way and a lesser deformity.

• Combining two procedures saves you from anesthesia and recovery a second time.
Delayed reconstruction

• Some patients are never offered the option of immediate reconstruction. Some choose to delay reconstruction. We are quite comfortable performing delayed reconstructions, even years after the initial mastectomy.

• New techniques are particularly useful to salvage failed reconstructions.
How many operations will be needed?

• Initial procedure
  – Creates the breast mound
  – Is often the most complex, with the greatest recovery.

• Second procedure
  – Is a revision of the breast reconstruction (e.g. “tweaking,”)
  – May involve a symmetry procedure for the other breast
  – May include a nipple reconstruction
  – Is almost always an outpatient procedure

• Final procedure
  – Often a nipple areola tattoo performed in the office.
Will I need surgery on the other breast?

- Depends on type of procedure, size and ptosis ("sagging") of other breast, and patient desires
- Federal/state law mandates coverage for contralateral symmetry operations
- Options: reduction, mastopexy (breast lift), augmentation
Will breast reconstruction impact on the ability to detect recurrent or other cancers?

No
Genetic Testing

• Why should the plastic surgeon care?
• Might impact on reconstructive choices, now or in the future.
• We refer all our higher risk patients for genetic counseling and discuss it with any patient below the age of 50.
Reconstructive Options
Reconstructive options

• Expander/implant
• Latissimus - alone or with expander/implant
• TRAM (pedicle or free) – in practices experienced with perforator flaps this has been largely replaced by the DIEP/SIEA
• Perforator free flap (DIEP, SIEA, SGAP, IGAP, PAP, others)
• The future – ?
Texas Center for Breast Reconstruction Pearls

Every approach has pros and cons

Always have plan B

There is no right or wrong answer. There are only personal decisions.
Expander/Implants

• Typically a two stage procedure.
• The expander is placed to stretch the skin and muscle…to re-establish the skin “bra” that the breast lived in.
• Often we use an acellular dermal matrix to help cover the expander and ultimately the implant.
• Silicone or saline breast implants are placed in a second operation.
• May be done with a latissimus flap, particularly if there has been radiation
Tissue Expander

Illustration courtesy of breastreconstruction.org
Expander/Implants

• Advantages:
  – No additional scars
  – Minimal hospitalization
  – Brief recovery
  – Can “control” breast size
Expander/Implants

• Disadvantages:
  – Multiple expansions needed
  – Difficult to match a natural contralateral breast with an implant
  – Short terms risks include infection and malposition
  – Long term risks: capsule contracture, implant malposition, rupture – these may require additional surgery

Ruptured silicone implant
Expander/Implants

- Silicone vs. Saline
  - Silicone a bit more natural appearing and feeling
  - No data that either implant lasts longer than the other
  - No scientific data that silicone implants cause any disease
  - Both implants have equivalent risks of long term complications.
Expander/Implants

After right lumpectomy & prior to mastectomy

After tissue expander placed & expanded

Tissue expander replaced with silicone implant
Expander/Implants

Right mastectomy for breast cancer.

Patient later chose left prophylactic mastectomy.

Reconstruction with tissue expanders and then saline implants.
Direct to Implant

• One step approach reserved for selected patients with good preservation of the breast skin following mastectomy.
• Dependent upon what general/breast surgeon determines is best approach for mastectomy
• Often patients will still want a revision procedure to make an adjustment to their reconstruction – in this case may not be better than the traditional tissue expander with implant exchange.
Acellular Dermal Matrix to cover the lower pole of the implant

Illustration courtesy of breastreconstruction.org
Latissimus Flap

• Almost always combined with expander or implant
• The latissimus may protect the implant and improve its longevity, particularly in the setting of prior radiation
• Usually gives a more natural appearance than implant alone
• Allows for immediate reconstruction with permanent implant sometimes, obviating the need for a tissue expander
Latissimus Flap

• Advantages:
  – Can improve aesthetics
  – Very helpful in prior radiation; ”protects” the implant
  – Allows for immediate reconstruction of the breast along with an implant that can save the expander step
  – Good “plan B” option in cases of failure of other options
Latissimus Flap

• Disadvantages:
  – Almost always requires an implant
  – Results in a scar on the back
  – Necessitates intra-operative change in patient position and increases anesthesia time
  – Longer hospital stay than expander/implant (though not always)
Latissimus flap

Illustration courtesy of breastreconstruction.org
Patient had undergone a cosmetic breast augmentation. Years later she developed right breast cancer, had a lumpectomy & radiation therapy. And eventually a right mastectomy. The reconstruction was a latissimus flap with implant, and later nipple-areolar reconstruction & tattooing.
Latissimus Flap

After lumpectomies, prior to right breast mastectomy

5 months after the latissimus flap with silicone implant

Back scar from latissimus flap

After 2nd stage of surgery & left implant for symmetry
Abdominal Free Flaps for Breast Reconstruction (Tummy Tuck Flaps)

- Autologous reconstruction – uses a woman’s own tissues to reconstruct the breast.
- The goal is to restore a woman’s breasts so that they look natural in and out of clothes.
- Abdominal skin has tone and texture similar to breast tissue.
- A by-product of the procedure is improvement in abdominal contour.
Tummy Tuck Flaps

• Challenges in abdominal free flap breast reconstruction:
  – Providing the greatest volume of tissue
  – Minimizing flap problems
  – Preserving abdominal wall function

• Free TRAM vs. Perforator Flaps (DIEP, SIEA)
Free TRAM Flap
Breast Reconstruction

Depending on technique, TRAM flap involves some impact on abdominal wall muscle and fascia. This leads to potential decreased abdominal wall tone and future risk of hernias. For this reason, practices experienced in DIEP & other perforator flaps do not often use this technique.

Illustration courtesy of breastreconstruction.org
Perforator Flaps

• The perforating vessels are dissected out of the muscle and the muscle is preserved so there is less donor site morbidity.

• DIEP- deep inferior epigastric artery flap

• SIEA- superficial inferior epigastric artery flap

• These flaps require microsurgical expertise and are not widely available in the U.S.

• We consider them to be the gold standard and have replaced free TRAM flaps in our practice.
Perforator Flaps (DIEP)

Illustrations property of Texas Center for Breast Reconstruction
Perforator Flaps (DIEP)

• Advantages:
  – Less abdominal wall morbidity (lower rate of hernia, weakness, and bulging)...abdominal wall left intact and donor site equivalent to tummy tuck
  – Shorter hospitalization (sometimes)
  – Less pain than with TRAM
  – Quicker return to life than with TRAM
Perforator Flaps (DIEP)

• Disadvantages:
  – Longer surgery
  – More complicated than all other options
  – Like free TRAM, small risk of complete flap failure
  – Like latissimus, additional scars elsewhere on body
Patient was diagnosed with a left breast cancer & tested positive for BRCA gene mutation so underwent bilateral mastectomies. She had an immediate bilateral breast reconstruction – a DIEP on the right side and an SIEA on the left side with later revision and nipple-areola reconstruction.
Perforator Flaps

This patient underwent bilateral mastectomies and reconstruction elsewhere with implants but was unhappy with the results. She came from New Mexico to Texas to have the implants removed and a bilateral DIEP flap reconstruction.
Perforator Flaps

This patient originally underwent tissue expander reconstruction on the right, done at another office, but developed an unusual infection and had to have the expander removed. She came to our office for a right DIEP flap. She subsequently had a lift on the left side and replaced an implant on the left side that had been placed years earlier for cosmetic reasons.

After removal of tissue expander on right
After 1st stage DIEP flap reconstruction
After revision surgery & surgery on left breast
What autologous breast reconstruction would you offer if the abdominal donor site is unavailable or inadequate?
SGAP

• They are not our favorite flaps but we do them:
  – Dissection difficult
  – Short pedicle
  – Intraoperative position change
  – Conspicuous scars
  – Contour deformity
  – Asymmetry
Perforator Flaps

This patient originally had a left mastectomy and TRAM flap done elsewhere. She then had to undergo a right mastectomy. She was no longer to do the DIEP flap as the tissue was used for the prior TRAM flap so she underwent a right SGAP flap.
Fleur-de-Lis Upper Gracilis Myocutaneous Free Flap

Illustration courtesy of breastreconstruction.org
Our Advice

• Stay informed…you are your own best advocate
• Ask to see patient photos and talk with a patient who has had the procedure you are considering.
• Choose a surgeon who can offer you all of the options.
• If considering a perforator flap reconstruction, choose a practice where two qualified surgeons will be performing your procedure. This will significantly reduce the length of your operation.
• We believe it is important for each patient to feel comfortable with their surgeon…trust your instincts!
Resources

www.dallasbreastreconstruction.com
www.dallasiiep.com
www.texaspsa.com
www.breastreconstructionforum.org
www.plasticsurgery.org
www.breastreconstruction.org
Thank You and Good Luck on Your Journey!
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