



MIDWEST

Breast & Aesthetic Surgery

Breast Reconstruction with Abdominal Tissue

A flap is a piece of one's own tissue (skin and fat) that is moved from one area of the body to the chest to create a new breast. They can be described according to the method by which they are moved:

- **Pedicled flaps** remain attached to the body by a bridge of tissue when they are rotated to a new location
 - Generally require muscles to be included with the flap tissues
- **Free flaps** are completely removed from the body and transplanted to a new location using **microvascular techniques** to reattach the blood vessels of the flap to the blood vessels in the new location (on the chest for breast reconstruction)
 - This type of surgery allows the muscle to remain intact and prevents muscle weakness because the flap only consists of skin and fat, not muscle
 - Less pain and less risk of abdominal weakness and bulging (hernia)

Non-microvascular flaps / Pedicled flaps:

- **Pedicled TRAM (Transverse Rectus Abdominis Musculocutaneous) Flap:**
 - One end of the muscle remains attached in the abdomen
 - Muscle and fat are tunneled under the skin to reach the breast area
 - Risk of muscle weakness because the six-pack muscle is removed from the abdomen

Types of Microvascular Flaps:

- **DIEP (Deep Inferior Epigastric Artery) Flap:**
 - Leaves the muscle and its fibrous covering (fascia) largely intact
 - Skin, fat, and the deep inferior epigastric vessels are completely separated from the abdomen and reattached at the chest
- **SIEA (Superficial Inferior Epigastric Artery) Flap:**
 - Similar to the DIEP flap, but uses blood vessels that are closer to the surface of the abdominal wall
 - This can avoid incisions in the deeper tissues and can reduce pain and risk of abdominal bulging (hernia)
 - The surgeon will not be able to tell if this surgery is possible until they are in the OR and can see your individual blood vessel pattern
 - This option is rarely available due to inadequate vessel size and/or anatomy

- **Muscle-Sparing Free TRAM Flap:**
 - A small portion of six-pack muscle is used along with the skin and fat

Length of Surgery:

- One side: 4-5 hours for DIEP
- Two sides: 6-7 hours for DIEP
- Longer times may be needed for difficult cases

Length of stay:

- 3-4 days for microvascular (DIEP, SIEA, Free TRAM)

Scars:

- Abdominal incision runs hip to hip, below the belly button
- Incision around the belly button
- Scars on breast may vary based on timing of reconstruction
- Less scars needed when reconstruction is done immediately after mastectomy

Recovery:

- 4-6 weeks

Advantages:

- Natural appearance and natural tissue
- Soft to touch
- Results in a flatter stomach, “tummy tuck” pattern skin and fat removal

Recommended if:

- Healthy enough for longer surgery
- Have enough abdominal tissue
- Have had radiation to breast
 - Implants are associated with higher complications if radiated

Surprising Facts:

- Most previous abdominal surgeries acceptable
- Can be used to reconstruct one or both breasts
- Can be done even years after mastectomy
- Can be done to revise unsatisfactory implant reconstructions