

## Part II: Breast Cancer Surgery and Reconstructive Options

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*The Breast Cancer Program at the Froedtert & The Medical College of Wisconsin Clinical Cancer Center provides an interdisciplinary approach to breast cancer treatment in a state-of-the-art cancer center. (froedtert.com/cancer)*

In Part I of this series, we reviewed which breast cancer patients are eligible for breast-conserving surgery versus mastectomy and discussed who should get immediate versus delayed post-mastectomy reconstruction. In this issue, we review all post-mastectomy reconstructive options offered at Froedtert & The Medical College of Wisconsin.

### **What options are available for women who desire breast reconstruction?**

The Department of Plastic and Reconstructive Surgery at Froedtert & The Medical College of Wisconsin is committed to providing the most advanced forms of breast reconstruction available worldwide in a manner that maximizes each patient's ability to return to a fully active lifestyle in as short a time as possible.

### **What makes the DIEP Flap different?**

A woman's own abdominal tissue has long been considered the gold standard for breast reconstruction following mastectomy. The DIEP Flap uses a woman's own tissue to rebuild the breast. It provides skin and soft tissue to truly "replace like with like," creating a reconstructed breast that is soft, mobile and warm.

Plastic surgeons have used the TRAM Flap, or Transverse Rectus Abdominis Myocutaneous Flap, since 1980. While this procedure provides an excellent source of skin and subcutaneous fat, unfortunately, it also requires the sacrifice of one, or in bilateral cases, both rectus abdominis muscles which are important "core stabilizers" of the torso.

The early 1990's saw the evolution of this technique into the DIEP Flap, or Deep Inferior Epigastric Artery Perforator Flap, a technique now considered state-of-the-art in reconstructive breast surgery worldwide. The DIEP Flap provides precisely the same skin and subcutaneous fat as the TRAM Flap, but preserves the abdominal wall muscles and nerves that innervate those muscles—a major functional advantage. This critical difference reduces the incidence of complications related to abdominal wall hernias and abdominal weakness as a result of muscle sacrifice. Most important for the patient, post-operative pain, hospital stay and recovery time are reduced.

The DIEP Flap uses the same excess abdominal tissue that is removed in an aesthetic abdominoplasty or "tummy tuck," an attractive benefit for patients. This option is available to women at the time of mastectomy or years later, and previous abdominal surgery is rarely a contraindication. The DIEP Flap requires highly specialized training and is more time consuming than previous techniques. It is available at relatively few specialized centers nationwide.

However, this technique can truly maximize the patient's reconstructive result without compromising her abdominal wall function.

### **Breast Implants and Acellular Dermal Matrix Grafts — Major Advances**

Breast implants and tissue expanders have been a mainstay of post-mastectomy breast reconstruction for more than 30 years. This straightforward form of reconstruction requires minimal extra time in the operating room and essentially no extra inpatient admission time relative to mastectomy without reconstruction. This form of reconstruction involves placing an expandable breast implant under the pectoralis major muscle immediately at the time of mastectomy or at some time after mastectomy in a “delayed” fashion. The implant can then be filled during short office visits to restore the original volume of the patient's breast.

A major advance in implant-based breast reconstruction has been the development of techniques that use acellular dermal matrix grafts to augment the pectoralis major muscle. This technique increases the space available for implant placement underneath the pectoralis muscle, reducing pain associated with expansion and the time required to achieve full expansion. Significantly more natural-appearing results are routinely possible with this technique than with previous implant-based techniques. Members of our breast reconstruction team currently serve as teaching faculty for instructional courses introducing these techniques to plastic surgeons nationwide.

### **Other Forms of Breast Reconstruction**

At Froedtert & The Medical College, several other forms of breast reconstruction are also available, expanding the scope of options available to our patients. The Superficial Inferior Epigastric Artery Perforator Flap (SIEA Flap), the Thoracodorsal Artery Perforator Flap (TAP Flap) and Latissimus Dorsi Flap (LD Flap) are all options routinely performed in our practice. Our commitment to providing this wide variety of reconstructive choices stems from the reality that not all forms of reconstruction are ideal for every patient. By providing a wide variety of options, we can optimize the reconstructive plan for each patient, finding a plan that fits not only her clinical needs, but also her lifestyle.

### **For More Information or an Appointment**

For more information or to arrange a consultation with one of our breast surgeons, please call 414-805-0505 or 866-680-0505. To arrange a consultation with one of our plastic surgeons specializing in breast reconstruction, please call 414-805-5440.

#### References:

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