

BI Surgeons Use **MICROSURGERY** for **ADVANCED BREAST RECONSTRUCTION TECHNIQUES**

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For patients with breast cancer, surgery takes both a physical and psychological toll, and self-esteem and self-image often suffer. Reconstruction can alleviate and potentially eliminate these added burdens. Now, advances in microsurgical techniques are allowing Beth Israel Medical Center plastic surgeons like Mark L. Smith, MD, to provide additional, improved reconstruction options, enhancing recovery as never before.

While a new generation of more natural feeling, silicone-filled implants have been approved by the FDA, many surgeons favor using a patient's own tissue in what are called "autologous tissue" reconstruction methods.

DIEP (deep inferior epigastric perforator) flap is one of the newer autologous techniques that reconstruct the breast using lower abdominal skin and fat, without any muscle. An abdominoplasty, popularly known as a "tummy tuck," provides the tissue and DIEP vessels, separated and removed from the underlying muscle. The tissue is transferred and the DIEP vessels are reattached under a microscope to small vessels in the breast area, restoring blood supply.

Intricate microsurgery improves blood supply, reduces tissue trauma

DIEP flap represents the evolution of the older TRAM (transverse rectus abdominis myocutaneous) Flap techniques, which removed the rectus abdominus muscle in varying degrees to provide blood supply. Now, microsurgical dissection along muscle fibers permits removal of vessels, intact and alone—without muscle sacrifice.

Advantages are numerous: more tissue can be transferred, healing improves, and the risk drops for abdominal hernia or bulge. Autologous reconstruction also offers a permanent solution, unlike implants which eventually need replacement.

No abdominal muscle involvement, less tissue trauma

Another new autologous option is the SIEA (superficial inferior epigastric artery) Flap, which involves abdominoplasty and different blood vessels, passing from the groin into the tissue above, instead of through the abdominal muscle. Abdominal hernia or bulge risk is eliminated; pain and recupera-

tion time both diminish, while a slight increased chance of fluid accumulation and seroma formation exists because of the numerous lymphatic channels in the groin. Unfortunately, SIEA anatomy varies considerably between individuals and only about 30 percent of patients have an adequately sized vessel to make this option viable.

For women with inadequate abdominal tissue, the buttock offers an alternate donor site with a procedure called GAP (gluteal artery perforator) Flap.

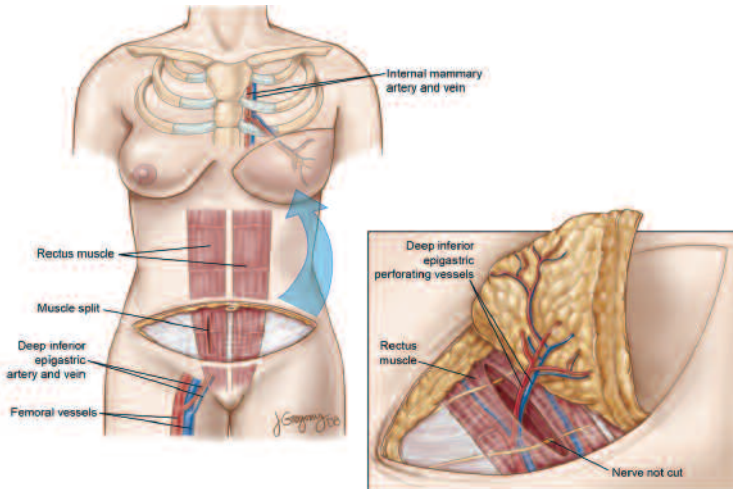
Comprehensive, multidisciplinary care is crucial whatever reconstruction is selected

Initial consultation should include a plastic surgeon, breast surgeon, medical and radiation oncologists and possibly a genetics counselor. (SEE SIDEBAR ON PAGE 3.) Autologous reconstruction may be combined with a skin- or nipple-sparing mastectomy, or a more radical approach may be advised. The team approach ensures that all aspects of a patient's care are considered before treatment begins.

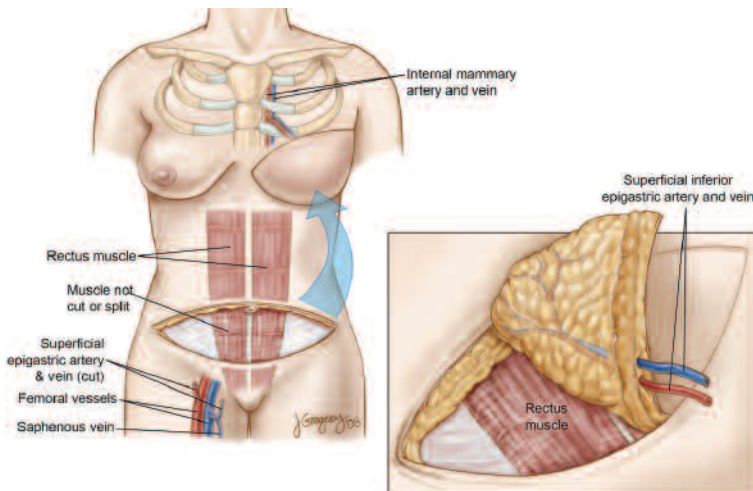
Webcast spotlights DIEP Flap

A one-hour Beth Israel Webcast offers a detailed look at DIEP Flap breast reconstruction after a bilateral nipple-areola-sparing mastectomy. Available for viewing at www.or-live.com/bethisrael/1896/, surgical footage shows the two-team approach with a breast surgeon and plastic surgeon working simultaneously, removing the malignancy and reconstructing the breast in one operation.

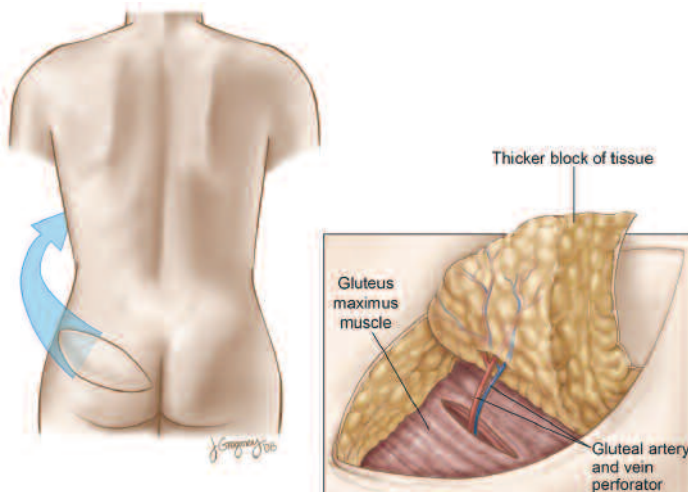
For more information, or to refer a patient for a breast reconstruction consultation, please call Mark Smith, MD, or one of his credentialed colleagues at (212) 844-8796.



DIEP Flap breast reconstruction: Abdominoplasty plus muscle split for vessel removal and microsurgical transfer to breast



SIEA Flap breast reconstruction: Abdominoplasty plus vessel removal without muscle involvement



GAP Flap breast reconstruction: Buttock tissue removal plus microsurgical muscle split for vessel removal