Breast reconstruction for mastectomy patients has evolved to provide safer and more convenient options as well as improved cosmetic results. Plastic surgeons in the UCLA Center for Breast Reconstruction work as part of a team along with breast surgical oncologists, breast medical oncologists, radiation oncologists, wellness counselors and other personnel in the Revlon UCLA Breast Center and the UCLA Breast Center Santa Monica to provide reconstructive consultations and care for patients with breast cancer and other breast-related problems.

UCLA plastic surgeons tailor their reconstructions to their patients’ individual oncologic needs. When recommending treatment, the reconstructive team considers the patient’s preference, whether reconstruction should be delayed months or even years, the need for adjuvant cancer therapy (chemotherapy or radiation) and the patient’s medical history and health.

**Autologous reconstruction**

While technically demanding, autologous breast reconstruction offers some important advantages over prosthetic implants. Autologous reconstructions can appear more natural than implant reconstructions. They also tend to be more durable over time, allowing patients to avoid revision operations.
UCLA plastic surgeons encourage reconstruction at the time of the mastectomy for most patients and specialize in the “gold standard” of breast reconstruction, the deep inferior epigastric perforator (DIEP) flap. This operation is a microvascular, muscle-sparing variant of the transverse rectus abdominis myocutaneous (TRAM) procedure. Preserving the rectus abdominis muscle is less harmful to the abdominal wall, decreases postoperative pain and minimizes the risks of abdominal weakness and bulging. Surgeons are often able to spare the entire rectus muscle by performing a DIEP flap. The microsurgically transferred free flap also enjoys a healthier, more robust blood supply compared to pedicle flap alternatives, resulting in fewer subsequent complications with the flap.

UCLA has one of the largest microsurgery programs in the United States, performing approximately 150 free-flap breast reconstructions annually. The department’s success rate for microvascular breast reconstruction is 99.5 percent, well above national averages for these procedures. Also contributing to excellent outcomes is a specialized postoperative flap unit, staffed by specially trained nurses that monitor flaps for perfusion problems.

For patients who are not good candidates for the muscle-sparing TRAM or DIEP procedures, UCLA plastic surgeons offer numerous alternative autologous breast reconstruction options. Tissue can be harvested using similar microvascular surgical techniques from the buttock, hip or thigh areas to create a new breast mound. In some cases, patients may prove to be better candidates for a pedicle flap, in which case the latissimus dorsi muscle and skin from a patient’s back can be tunneled through the axilla to reconstruct the breast.

**Prosthetic-implant reconstruction**

The use of saline or silicone implants can be an excellent option for breast reconstruction in selected patients. Patients who lack sufficient autologous tissue in their lower abdomen to create adequate breast volume (especially in cases of bilateral reconstructions) are the best candidates for this type of reconstruction. Implants are increasingly the choice of the growing number of women who opt for prophylactic mastectomy, due to an increased risk for breast cancer, because these patients face bilateral mastectomy.

Moreover, surgeons are now able to offer implants to some women who will proceed to adjuvant radiation therapy. Studies indicate that radiation therapy can be performed on select patients with form-stable implants without fear of damaging the implant.

**Fat-grafting revision techniques**

Secondary adjunct surgery featuring fat grafting to improve the shape of the breast has become more prevalent. In this procedure, stem cells are harvested from fat in the abdominal wall or thighs and transferred to the breast to enhance shape and symmetry. At UCLA, surgeons work closely with patients to discuss goals for reconstruction and ensure a pleasing aesthetic result.