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# Treatment May Help Ease Effect of Cancer

By **RONI CARYN RABIN**

Top plastic surgeons from around the country met in Manhattan last month to observe an experimental surgery that may cure **lymphedema**, a serious complication of **breast cancer** treatment.

As some surgeons crowded into an operating room at New York Eye and Ear Infirmary and others watched a live video broadcast, Dr. Corinne Becker, the French doctor who pioneered the procedure, harvested lymph nodes from a patient's groin to transplant to her underarm, where nodes had been removed earlier during **cancer** treatment.

"Voila!" she exclaimed, motioning to her colleagues as she rubbed a small piece of tissue between thumb and fingertips to check for the presence of the small, pearl-shaped lymph nodes. "Look what is here — a wonderful node."

She warned that extracting too much tissue could injure the patient, even causing lymphedema in another limb. Using the French word for 'greedy,' she said, "It's better not to be 'gourmand' — aggressive."

This innovative procedure, called an autologous vascularized **lymph node** transfer, is used to treat lymphedema, a common side effect of breast cancer treatment. Removal of the lymph nodes under the arm closest to the affected breast is believed to stem the spread of cancer, although new research suggests it can be avoided in many cases. But the loss of lymph nodes often leads to chronic **swelling** and soreness in the arm.

In the new experimental surgery, the missing lymph nodes are replaced with a handful of healthy nodes transplanted from elsewhere in the patient. If all goes according to plan, the lymph nodes make themselves at home in their new location and connect with lymph vessels and start doing their job, filtering waste and draining fluid that has accumulated in the arm.

But the operation is controversial and not without risk, and though it is reported to have cured some patients and improved the condition in many others, it is seldom performed in the United States. Even proponents say it should be reserved for patients who don't respond to conventional treatment.

The first randomized clinical trial of its effectiveness is just getting underway, led by Dr. Constance Chen, a New York City plastic surgeon who specializes in muscle-sparing reconstructive breast surgery that uses the patient's own tissue.

Even in the absence of good data, however, demand for the procedure is bound to grow. More than 2 million women in the United States have been treated for breast cancer, and some studies suggest lymphedema develops within five years in up to 40 percent of women who have undergone breast cancer surgery. While the condition can be managed with constant care and **physical therapy**, it often severely restricts activity and is generally considered incurable.

In the absence of better data about the benefits of lymph node transfer, however, insurers may balk at covering the procedure, which involves expensive, complex microvascular surgery to connect tiny blood vessels.

"From just a plumbing standpoint, it makes sense — someone took out the lymph nodes, you put them back in," said Dr. Babak Mehrara, a reconstructive plastic surgeon at Memorial Sloan-Kettering Hospital in Manhattan. "The problem is that some of the science doesn't support it. It probably works for some people and doesn't for others."

Prior to transferring nodes to their new location, Dr. Becker aggressively clears away dense **scar** tissue under the arm that may be "clogging up" the lymphatic channels and preventing fluid circulation. That is one of the riskiest aspects of the surgery, because nerves and blood vessels leading to the arm could be affected.

“We worry that if a person already has a compromised lymphatic surgery, you can go in there and do further damage. We always say the less surgery the better,” said Saskia Thiadens, executive director of the National Lymphedema Network.

But, she added, “Obviously we’re eager to see what the outcomes are.”

Dr. Chen, who co-organized the symposium hosting Dr. Becker with Dr. Joshua L. Levine, director of breast reconstructive services at New York Eye and Ear Infirmary, agrees that more scientific evidence is needed. But she is optimistic the surgery will benefit patients and says the toll lymphedema takes has not been fully appreciated by the medical community.

“Treatment for lymphedema generally doesn’t end,” Dr. Chen said. “Women will say managing their lymphedema is worse than coping with breast cancer — now they have to deal with an every day affliction that affects their day to day lives.”

She is launching the first double-blinded randomized clinical trial of lymph node transfer, a multicenter study that will enroll 88 patients with lymphedema in one arm. Half will be randomly assigned to lymph node transfer, while the others will undergo a dummy surgical procedure. The patients will be followed for two years after the operation to see if their quality of life improves.

“There are naysayers with every single surgical innovation that comes along,” Dr. Chen said.

Dr. Becker claims to have had enormous success, but while she has operated prolifically in Europe and other parts of the world on patients with cancer as well as those with congenital lymphedema, she has published only sporadically.

In a 2006 paper in *Annals of Surgery*, she reported that 90 percent of patients improved after surgery and almost half were cured, but the sample included only 24 women and there was no control group.

One of the patients operated on by Dr. Becker and Dr. Chen during the daylong symposium, Jennifer Miller, 40, a portfolio manager at an investment firm in Manhattan, said she has already felt a dramatic improvement.

“I used to have this pain that was like my whole arm had a headache, and that’s gone,” Ms. Miller said.

Ten days after surgery the swelling in her right arm was reduced by half, compared with measurements taken 10 days prior to the operation, and she has been able to bare her arm, which she used to keep covered in a compression treatment sleeve most of the day.

Though her right arm is still swollen and larger than her left, she said, “It already feels more manageable, and I’m still recovering from surgery. Even if this is all the improvement I get, I’m happy.”

But whether the change is a true effect of the transfer or a placebo effect of undergoing treatment is not known. Doctors say it is unlikely the transplanted nodes are already functioning, and it’s possible some other aspect of the surgery is having a beneficial effect, Dr. Chen suggested.