

November 05, 2019 | By Jackie Carr

## Novel Surgery May Prevent Lymphedema in Patients with Breast Cancer

### Microsurgery helps prevent complications following lymph node dissection

Of the 3.5 million current breast cancer survivors in the United States, one in five will be diagnosed with a painful swelling condition called lymphedema, which can occur as a consequence of lymph nodes under the arms being removed, also known as axillary lymph node dissection. UC San Diego Health now offers a novel surgical procedure to help prevent this debilitating condition.

“While the majority of patients do not experience complications from lymph node removal, it can be devastating for those who do. Immediate lymphatic reconstruction is a preventive procedure to restore lymphatic connections in the arm,” said Frederic Kolb, MD, plastic surgeon at UC San Diego Health. “This delicate surgery is performed at the same time the lymph nodes are removed and tested for cancer. Instead of treating patients after lymphedema presents itself, we hope to prevent the condition for patients who may be at risk.”

During lymph node dissection, Kolb and his team map the drainage routes of the nodes in the upper arm. The team reconnects any disrupted channels by creating a “by-pass” to prevent swelling. Using a microscope, the team reroutes the tiny vessels, many less than the thickness of a dime.

“This microsurgical technique ‘re-plumbs’ the lymphatic system to allow for the normal flow and drainage of lymphatic fluid,” said Christopher Reid, MD, plastic surgeon, UC San Diego Health. “It is intended to prevent the chronic limb swelling and infection associated with breast cancer-



*Frederic Kolb, MD, plastic surgeon, UC San Diego Health*

related lymphedema. The technique may also be applicable to prevent leg lymphedema caused by lymph node dissections in the groin.”

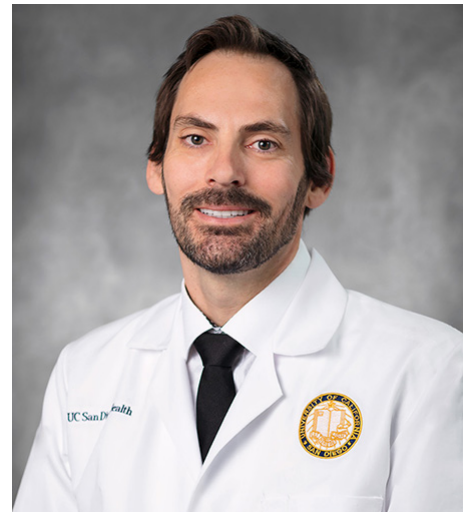
“As a cancer surgeon, my primary goal is to accurately stage the cancer to identify which patients need more aggressive treatment,” Sarah Blair, MD, surgical oncologist at UC San Diego Health. “In some patients, significant lymph node dissection can unintentionally result in damage to healthy tissue. With this procedure, we can help prevent lymphedema and give the patient a better overall experience and outcome.”

The lymphedema prevention surgery represents one of several emerging microsurgical techniques being used to care for patients with breast cancer. Certified lymphedema therapists are also available to help patients prevent or manage the condition through exercise and massage.

“The Comprehensive Breast Health Center has developed protocols for pre-operative evaluation of patients and immediate postoperative evaluation of lymphedema and range of motion issues associated with breast cancer treatment,” said Anne Wallace, MD, director, Comprehensive Breast Health Center. “Data shows that both early assessment and treatment by occupational therapists after breast cancer treatment leads to improved physical outcomes.”

For more than two decades, UC San Diego Health’s nationally recognized Comprehensive Breast Health Center has offered a multidisciplinary program to treat female and male patients with any kind of breast issue including all stages of cancer. From detection to diagnosis and treatment, the program uses the patient’s genetic profile to customize treatment options, including surgery, chemotherapy, hormonal therapy, radiation and reconstruction.

The surgical team offers multiple options to help the patient safely achieve their desired outcome. This includes advanced oncoplastic options for patients desiring breast conservation to the full scope of implant-based and non-implant-based reconstruction using a patient’s own tissue after mastectomy. The team approach allows for shared decision making between the patient and the plastic surgeon who has specific expertise in any of these choices.



*Christopher Reid, MD, plastic surgeon, UC San Diego Health*

When needed, patients have access to a specialized recovery unit inside Jacobs Medical Center. Care is provided by a sub-specialty trained group of nurses who provide close and continuous monitoring of tissue reconstruction, as well as overall well-being. The team also includes anesthesiology pain management experts who have specialized training in block use and other postoperative pain management regimens to decrease pain, shorten hospital stays, and reduce the need for opioid pain medication.

UC San Diego Health is one of only 50 National Cancer Institute (NCI)-designated Comprehensive Cancer Centers in the country and the only such center in San Diego County.

To learn more about this surgery and the Comprehensive Breast Health Center visit [health.ucsd.edu](http://health.ucsd.edu).

---

#### MEDIA CONTACT

**Jackie Carr**, 858-249-0456, [jcarr@ucsd.edu](mailto:jcarr@ucsd.edu)

UC San Diego's [Studio Ten 300](#) offers radio and television connections for media interviews with our faculty, which can be coordinated via [studio@ucsd.edu](mailto:studio@ucsd.edu). To connect with a UC San Diego faculty expert on relevant issues and trending news stories, visit <https://ucsdnews.ucsd.edu/media-resources/faculty-experts>.