Breast cancer treatment improves
New radiation therapy lasts days, not weeks

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Kay Lenart has seen a mother and a male partner go through breast cancer — a rarity in the latter case — and then last March, she braced for her own diagnosis and treatment.

Dreadful news, to be sure, but the south Fort Myers resident got a pleasant surprise, too.

Her radiation treatment would last a mere five days, doctors told her, thanks to a device that allows them to direct the radiation squarely at the cancer site. Compare that to the old method, where cancer patients spent six weeks in radiation treatment, and subjected their entire breasts to exposure.

The device is known as “Strut-Adjusted Volume Implant” or SAVI, and doctors at 21st Century Oncology in Fort Myers were among the first in the nation to use it after the Food and Drug Administration’s 2006 approval.

Today, Dr. Constantine Mantz, a radiation oncologist at the practice, will present his latest research on SAVI’s outcomes at the American Society for Therapeutic Radiology and Oncology conference in Boston. Contributing to his findings was Dr. William Kokal of Suncoast Surgical Associates, part of Lee Memorial Health System. Kokal is a surgeon who removes the tumor and inserts the SAVI device before Mantz takes over for radiation treatment.

According to their data, the new treatment has far fewer side effects than the technology that preceded it. What’s more, the upgraded device allows more patients to have the direct radiation injection instead of full-breast radiation. That saves them time, reduces complications and preserves the healthy breast tissue, offering better cosmetic outcomes than the traditional therapy.

“Before it was really one-size-fits-all,” Kokal said. “With this, we can dramatically tailor it.”

The American Cancer Society estimates 184,450 Americans will be diagnosed with breast cancer this year and 40,930 people will die from the disease.

Treatment improves

Standard radiation for breast cancer treatment used to mean six weeks of daily radiation. Six years ago, medical manufacturer Cytyc Corp. won FDA approval for Mammosite, a device that allowed doctors to better target a breast patient’s cancer site. It was inserted into the breast via a catheter and inflated like a balloon, allowing doctors to place radiation seeds into the area the tumor had inhabited. It also reduced the treatment time from six weeks to five days.

This kind of internal radiation treatment is known as brachytherapy. The traditional radiation was delivered externally — something akin to an X-ray.

Mammosite was a leap forward, but it had limitations, Mantz and Kokal said.

Patients whose tumors were located close to the skin or to the lungs could not use Mammosite — targeting radiation that close to the organs could potentially harm them, doctors explained. Those patients had to undergo the traditional six-week therapy.

Mantz said oncologists were pushing device-makers to come up with something even more precise. SAVI, manufactured by Cianna Medical, answered their call. Neither Mantz nor Kokal has financial ties to the company, they said.

SAVI has 11 catheters through which doctors can insert radiation seeds. They can select which catheters get the seeds, avoiding those tubes that run too close to the skin or too deep into the breast.

SAVI’s advances allow roughly two times as many women to get the targeted therapy, the doctors said. It also appears to be superior to Mammosite in preventing seromas — pockets of fluid that can occur after a lumpectomy.

The device so far has primarily been offered to patients with early-stage cancer. Buoyed by research in Fort Myers and other research sites, doctors are now examining whether SAVI is appropriate for patients in the later stages of the disease.

Recovery easier

Lenart said she likely couldn’t have used Mammosite because it would have pushed the radiation too close to her skin. But she was a candidate for SAVI.

“It was a little disconcerting, thinking that was going to be sticking out of you, but you know, you get through things,” Lenart said.

SAVI is inserted after surgery and must remain in the breast for a week or so during recovery and then the five days of radiation therapy. The device’s port is exposed, and nurses ensure the area remains sterile. Patients also take antibiotics as a precaution.

“You’re aware of it, yeah, but it’s not bad,” Lenart said. “It was nothing that caused me any problem.”

Having seen other loved ones go through cancer, Lenart said she was surprised at how relatively easy and complication-free the SAVI procedure was.

Tougher, though, was the chemotherapy that followed it. Lenart was not a candidate for tamoxifen, a drug commonly given to breast cancer patients to lessen the risk of further cancer development. She received five courses of chemotherapy instead.

Throughout it all, Lenart kept working — she works with a Sanibel resort reselling timeshares — and maintained her hobby, bellydancing. She performs regularly at Plaka II, a restaurant in Fort Myers.

“There were a couple of nights my legs were screaming at me, but I got through,” Lenart said.

Lenart had her six-month mammogram last Friday. She said it came back clear.

“(Cancer) isn’t something to be dreaded. You get through it. The results are good. It doesn’t stop your life. It may slow you down a bit, but it shouldn’t stop you,” she said.

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- Have a tumor less than 2.0 cm in size
- Have no evidence of cancer in the lymph nodes.

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Dr. William Kokal used a SAVI device to treat breast cancer in patient Kay Lenart. The device directs radiation treatment to specific areas with multiple benefits to the patient.

New breast cancer treatment

SAVI is a relatively new device that allows doctors to better target radiation treatment after the removal of a breast tumor.

SAVI applicator

1. The SAVI applicator is an expandable bundle of catheters. The physician places the applicator into the lumpectomy cavity through a small incision.

2. The catheter bundle is expanded inside the cavity by turning a mechanism outside of the incision.

3. Radiation delivered through the applicator's individual catheters allow doctors to better control the contour and radiation dose.

4. After patient receives the prescribed dose of radiation, the catheter is collapsed and retracted through the initial incision.

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