

Breast cancer BREAKTHROUGH

Richmond surgeon pioneers innovative breast cancer treatment

Content provided by [Bon Secours](#)

A local surgeon is among the first in Virginia to adopt an innovative new device that improves the treatment of breast cancer by more precisely targeting radiation treatment and providing for better follow-up exams.

James V. Pellicane, M.D., co-founder of Bon Secours Virginia Breast Center and director of breast oncology at the Bon Secours Cancer Institute in Richmond, has helped pioneer use of the BioZorb marker, which is placed during lumpectomy surgery. Lumpectomies are performed to remove the cancer as part of breast conservation therapy.

The unique BioZorb marker is the first device that identifies in a fixed 3-D array where the tumor is removed. It helps the radiation oncologist more reliably determine where to aim the radiation. The marker consists of a spiral made of a bio-absorbable material that holds six titanium clips. The spiral slowly dissolves in the body over the course of a year or more, and the tiny marker clips stay in place so the surgical site can be viewed for long-term monitoring.



James V. Pellicane, M.D.



METRO CREATIVE



"This device is sutured right to the surgery site and can be easily seen on our imaging equipment," said Dr. Pellicane. "The marker makes it very easy for a breast surgeon to communicate to the radiation oncologist exactly where the surgical site is located. Plus we're getting excellent cosmetic outcomes with the marker."

Breast cancer can be treated by mastectomy (breast removal) or by lumpectomy. With lumpectomy, a small amount of tissue containing the tumor is removed. In addition to the surgery, radiation treatment is typically

added to destroy any cancer cells that might remain behind in the breast.

Prior to development of the marker, the radiation treatment usually had to be directed at a larger portion of the breast. While this approach is proven to reduce the risk of recurrence, it can also expose healthy tissues to radiation.

"This device addresses many of the challenges that radiation oncologists have," said Lang Liebman, M.D., a radiation oncologist who treats many of Dr. Pellicane's patients after surgery. "For example, we typically do a boost of stronger radiation at the end of the course

of treatment. During the boost treatment, this device allows us to focus on a much smaller area of the breast. With this new marker, we can still be confident we've covered the area needing treatment, while doing a better job of protecting healthy tissue."

Among local patients who have benefited from the BioZorb device is Denise Graves, who is 58 and a retired critical care nurse. Her breast cancer was discovered during her yearly mammogram and treated with a lumpectomy, during which the device was placed to mark the site of the removed tumor.

Graves said she feels reassured by the presence of the marker because it will make it easier to monitor the site from which the tumor was removed. "It's fabulous that they now know precisely where to look. I'm relieved to know they will be looking at exactly the right spot," she said.

"Breast cancer surgery leaves a space where the tumor was removed," said Dr. Pellicane. "The marker's spiral design helps fill that space, and while the body is healing, it provides a scaffold for the body to rebuild around. This makes it easier for us to maintain the natural shape of the breast."

Graves reported she was very pleased with the cosmetic results. "I was very happy to have breast-sparing surgery," she said. "I can honestly say there is no difference in appearance except for two tiny incision marks."

