

On the Other Side:

Hospitalist Shares Her Experience with DIEP Flap Reconstruction and Resensation

By Barbara Brody

For Catherine Seangio, MD, June 2, 2022, will always be a date worth celebrating. It's not her birthday or wedding anniversary, but the day she had a bilateral mastectomy, followed by DIEP flap reconstruction and resensation.

"I call it my cure date," she says. "It marks me not wanting to undergo any more mammograms or worry about breast cancer."

A hospitalist for the U.S. Department of Defense in Northern Virginia, Dr. Seangio, now 50, learned she had cancer after a routine mammogram detected changes in a calcification her doctor had been tracking for a few years. A subsequent biopsy confirmed that she had ductal carcinoma in situ (DCIS), or stage 0 breast cancer, in her left breast.

"It was localized, so it hadn't spread yet," Dr. Seangio says.

She might have considered a unilateral mastectomy, but when an MRI detected a lesion in her right breast, she opted to go the bilateral route. She says she would have done the same thing had her genetic tests come back positive, despite having an older sister who's a breast cancer survivor.

"When I heard there was a lesion [in the right breast] and that I needed another biopsy, I told them not to bother – just take it all out," she says.

Today she has no regrets, even though the pathology report that came back after surgery didn't detect any cancer on the right side.

"I didn't want my life and my happiness and my fear to be dictated by having mammograms every six months," she notes. "I decided I'd rather do this when I'm young and pretty healthy than have to deal with breast cancer 10 years from now."



Catherine Seangio, MD, recovers after her procedure.

From doctor to patient

Shortly after her diagnosis, a referral from a gynecologist friend led Dr. Seangio to David Weintritt, MD, a breast surgeon at the George Washington University School of Medicine & Health Sciences. When Dr. Seangio expressed interest in reconstruction, Dr. Weintritt pointed her to ASPS member Alex Mesbahi, MD, a breast reconstruction specialist with the National Center for Plastic Surgery in McLean, Va.

Dr. Seangio initially assumed that reconstruction meant getting implants, so she was surprised when Dr. Mesbahi said she was a candidate DIEP flap reconstruction, which eschews implants in favor of transferring tissue from the stomach to the chest.

"I didn't even know that you could use your own belly fat," she recalls.

Although DIEP flap is a longer, more extensive procedure compared to getting implants, Dr. Seangio was intrigued by the possibility of combining a tummy tuck into her post-mastectomy reconstruction. The fact that she could use her own tissue, which seemed more natural and would eliminate any risk of having an immune reaction to foreign implants, was also appealing.

When Dr. Seangio then heard about Resensation™, a nerve-grafting procedure, she was sold.

"I wanted to get rid of the cancer," she notes. "To be able to have sensation afterward was a bonus."

Novel technique

Mastectomy patients are typically left with numbness in their chests, which can impact their intimate relationships as well as their everyday quality of life. Resensation is a relatively new procedure that aims to restore sensation by connecting nerves in the chest to nerves in the reconstructed breast tissue.

Dr. Mesbahi had performed other types of nerve grafts before, but he and Dr. Weintritt traveled to San Francisco to learn the Resensation technique from ASPS members Anne Peled, MD, and Ziv Peled, MD, prior to Dr. Seangio's surgery. Dr. Mesbahi believes that Dr. Seangio is one of the first patients in the Washington, D.C., area to undergo Resensation.

"Resensation can be done with flap or implant procedures, though it's more often done with tissue transfers," Dr. Mesbahi says. "Generally, anyone can get it, though some patients with very large breasts aren't candidates just because there's some limitation to the length of the nerve graft that can be used."

"The procedure works best for women who have undergone a nipple-sparing mastectomy, but it may also be used in other patients to preserve sensation in the breast skin."

The technique makes use of an allograft nerve provided by Axogen. Surgeons connect the nerves that were cut



(Top) Dr. Seangio and her surgeon, Alex Mesbahi, MD; (Bottom) Dr. Seangio enjoying time with her family.

during the mastectomy to nerves in the reconstructed breast, and the processed allograft nerve tissue serves as a bridge between the two. Over time, the graft regenerates and becomes part of the body. The goal is to restore feeling and prevent the numbness, so mastectomy patients can feel more like themselves. Because Resensation is still in its infancy, long-term success rates are unknown. Dr. Mesbahi is among the surgeons collecting patient data at baseline as well as three, six and 12 months after the procedure.

"Looking at the data so far, the procedure has a lot of promise," Dr. Mesbahi says. "It's not a particularly difficult technique to do, and it doesn't add a lot of risk. It brings a lot of hope to patients to be able to get more normalcy after a mastectomy. That's really critical to the evolution of breast reconstruction."

He adds that some patients can develop hypersensitivity, but that problem seems to be temporary and Dr. Seangio did not experience it.

Recovery and beyond

"As a physician, it's definitely very strange being on the other side, anticipating surgery and possible complications," Dr. Seangio says, adding that she was most concerned about the risks of going under anesthesia for six hours. Fortunately, everything went as planned.

Pain medication kept her relatively comfortable after the procedure, though her belly felt tight which made it difficult to sit up. Nurses monitored her closely to ensure that the nerve graft was taking. At first, Dr. Seangio was just thrilled to have made it through the procedure. Then she realized she could still feel her breasts.

"I'm not going to say it feels the same, but I definitely have sensation," she says, adding that she expects continued improvement as the nerve regenerates.

Since her surgery, Dr. Seangio has been steadily improving and working on increasing the range of motion in her arms. She also enjoys having a trimmer midsection.

"They chopped off my mommy belly," she laughs, adding that her son is now 12. "Aesthetically, it's beautiful. I'm very happy."

This summer, Dr. Seangio, her husband and her son traveled to Greece to celebrate her progress. Finding out that she had a trip on the horizon – her husband surprised her with the idea, pending her doctor's greenlight to travel – gave her extra motivation to keep moving and getting stronger.

"It's hard to be a patient, but I'm so grateful for the whole medical team that took care of me, as well as the support of my family during my recovery," she says. "You have to wake up every day and do well because you have people in your life who believe that you will succeed." **A**