

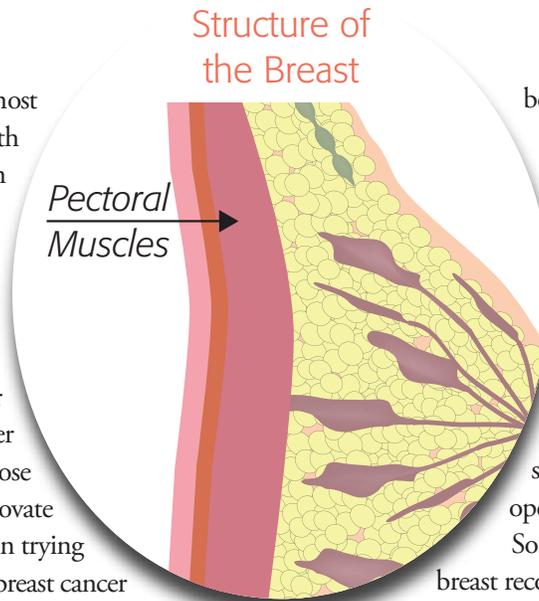
# Prepectoral Breast RECONSTRUCTION

by Todd Burdette, MD

**B**reast cancer is one of the most common serious health conditions in women, one in eight women will be diagnosed in their lifetime. Fortunately, advances in medical and surgical technologies allow surgeons and oncologists to make continual progress in breast cancer treatments. These treatments lead to more cures, longer survival, and fewer severe side effects of treatment. With better treatments of the cancer, more women choose breast reconstruction. Plastic surgeons innovate along with our cancer-specialist colleagues in trying to ease the mental and physical anguish of breast cancer treatment. Plastic surgeons strive to help women achieve a sense of wholeness after breast cancer treatment by rebuilding the feminine chest shape. A female breast can be reconstructed using implants or the patient's own tissues but more than 80% of women choose implants because of their relative simplicity and shorter surgical times. One of the most exciting recent advances in breast reconstruction technique is called prepectoral breast reconstruction. This technique has been shown to cause less pain, take less time in the operating room, and still provide a natural female shape.

Traditional breast reconstruction with implants under the pectoral muscle is still a good technique but has some elements that challenge surgeons and patients. The first is that the pectoral or 'pec' muscle is partially lifted off the chest and the implant which creates the shape of the new breast is placed underneath it. This causes some problems like a very unnatural movement of the breast when this muscle is activated. This unnatural movement wrinkles the skin and pushes the implant down and outward and is called animation deformity. Women also find the muscle goes into spasm for weeks after the surgery which is painful and requires more medications to control. Additionally, some women find that their arm movements never seem fully natural afterwards.

Prepectoral breast reconstruction with implants places the breast implant on top of the muscle. The pectoral muscle doesn't have to



be lifted which shortens the operation and greatly lessens pain. When the implant is on top instead of under the muscle, there is no animation deformity and this makes exercising and wearing form-fitting clothes much easier. There is some increased cost with this type of surgery because the breast implant must be wrapped in a special mesh to hold it in the proper place on the chest. Interestingly, some of this cost is offset by shorter operating times.

Some women who previously underwent breast reconstruction with implants under the muscle have taken notice of this new procedure and are asking to have their implants moved to a prepectoral location. This technique is evolving and gaining popularity. It's a complex and tedious procedure but it is doable in many women who seek it. Those who choose to have their implants moved from under the muscle to the prepectoral location benefit from less animation deformity and less discomfort. I anticipate this procedure becoming more popular in the years to come.

As with every technological advance, there will be adjustments and modifications as we learn and gain more experience. Here at Elliot Plastic and Reconstructive Surgery we offer prepectoral breast reconstruction with implants and procedures to change implants from under the muscle to the prepectoral location. We continually strive to stay expert with the latest innovations that can benefit our patients.



*Dr. Burdette is a graduate of Dartmouth Medical School where he completed his residency in plastic surgery. Prior to joining the Elliot Health System, Dr. Burdette worked at Concord Hospital from 2010 to 2017.*

*Dr. Burdette's main clinical pursuits are breast reconstruction and skin cancer reconstruction. He also treats patients with burns, soft tissue tumors, congenital deformities, and injuries to the face and body. Frequently, he collaborates on complex reconstructive cases with surgeons in other specialties. His surgical interests include cosmetic surgery to rejuvenate the eyelids, face, breasts and body.*