The diagnosis of breast cancer is typically accompanied by a level of anxiety rarely experienced by a woman and her family. A myriad of decisions must be made quickly, while frightening and unfamiliar emotions are high. Just the new vocabulary a woman must learn – and comprehend – is overwhelming, from the type of cancer she has to the treatment options available.

A woman has her medical team to advise her during this difficult time, helping her make important decisions about treating the malignancy, reducing the chances of recurrence, and restoring form and function to her breast.

When the decision is made to perform a mastectomy, the cancer may be successfully removed, but the decisions a woman must make are far from over.

Following removal of one or both breasts, she is faced with the most personal of choices – whether and when to have breast reconstruction. For many women, these can be the most difficult decisions of all.

Dr. J. Craig Merrell of Plastic Surgery Associates of Tidewater understands how agonizing these decisions can be. He wants women to know about every option available, including the newest procedures not widely offered in this or even larger metropolitan areas. He is hopeful that this article will help raise awareness among physicians and their patients concerning the advantages and disadvantages of many reconstructive options.

Dr. Merrell has also seen what can happen when women, under or uninformed, have unfortunate results from previous reconstructive surgery. These patients often suffer needlessly, and he wants them to understand the new corrective options now available.

Until the early 1980s, reconstructive alternatives largely consisted of old style silicone implants. The use of implants has much improved over the past decade and remains a popular choice today. Dr. Merrell employs FDA approved Mentor® implants – both Saline and Cohesive Gel types – and places them under the chest wall muscles, a safer approach that typically yields the best results. “This option is best suited to women with small to medium size breasts,” he says, “many of whom choose implants if their body fat isn’t sufficient to accommodate other modalities that utilize their natural tissue.”
Two such options were introduced in the late 1970s and 80s: the Latissimus Dorsi Flap (LATS) and the Transverse Rectus Abdominus Myocutaneous (TRAM) flap procedures. In the LATS flap, fat and muscle from the back are rotated to the front of the body to create the mound. The drawbacks of this procedure, Dr. Merrell explains, are that “it downgrades the function of the shoulder so women may experience significant weakness when pushing themselves up from a sitting position. And it leaves a wide scar on the back that’s hard to hide in many types of clothing.”

The TRAM flap is often recommended by plastic surgeons today. Dr. Merrell discourages use of the TRAM flap because it requires sacrifice of one or both rectus abdominus muscles when the woman’s lower abdominal skin and fat are tunneled up into the chest area. “Some women aren’t told that the TRAM flap permanently damages these muscles,” Dr. Merrell explains. “Many women who have had just one muscle removed and ALL women who have had both muscles removed experience permanent debilitating problems when they try to sit up. The loss of these muscles also increases the chance of abdominal hernia formation.”

So while these procedures can achieve a cosmetically satisfactory reconstructed breast, they can frequently leave women with disfigurements and/or loss of function that cannot be cured with therapy or even additional surgery. While these procedures are appropriate for some, Dr. Merrell uses them only when other options are not available. He has achieved national and international prominence performing a procedure that allows women to have reconstruction using their own natural tissue, taken from the abdomen, without destroying the muscles. This cutting edge procedure is called the DIEP flap.

Deep Inferior Epigastric Perforator (DIEP) Flap Reconstruction

DIEP flap reconstruction is the most advanced breast reconstruction available today. Due to the technical difficulty of the surgery, the extensive and specialized training required to perform it, the need for years of experience to get consistently good results, and the sheer stamina required to perform the procedure, very few surgeons routinely offer this option. Dr. Merrell has been doing DIEP surgery since 2001, and has performed more than 200 procedures, with a success rate exceeding 95%. He was fellowship trained in microsurgery at Southern Illinois University, and is a member of the American and International Society of Reconstructive Microsurgery. He has reported in the prestigious Journal of the American Society of Plastic Surgeons on his work with microsurgery in Vietnam with Operation Smile, which included his introduction of the DIEP technique.

Dr. Merrell describes the procedure with the clinical approach of a seasoned surgeon. He strives to place the final scar along the bikini line. Skin, tissue and tiny feeding blood vessels are removed microsurgically, leaving critical abdominal donor area and blood vessels that travel through the muscle to supply the skin and fat are drawn. The DIEP spares the muscles while using these vessels to keep the flap alive. In the middle, the initial result is seen with the tissue transferred to the chest wall and the blood supply re-established by microsurgery. The final result depicted on the right, usually requires other minor, outpatient procedures to create a new nipple and sometimes to lift, reduce, or enlarge the opposite breast for symmetry.
muscules in place. The tissue is transferred to the mastectomy site and reattached with the aid of the operating microscope. This tissue is then shaped to form a new breast. Nipple and areola construction can follow after post-operative swelling subsides, if a woman chooses. The artist’s rendition on page 17 shows the process of DIEP reconstruction.

When he describes the effect the surgery has on women, Dr. Merrell’s enthusiasm belies his surgical calm. “We’re offering a beacon of light,” he says, “an operation that gives hope to women facing the loss of one or both breasts that they can eventually feel—and look—normal again in almost all types of clothing, including swimsuits and lingerie, and they can do so without sacrificing the function of their shoulder or abdomen.”

There’s a bonus: this procedure in Dr. Merrell’s hands results in an abdomen that looks like the patient had a tummy tuck. In the words of one of his patients, “[my tummy is] tight and flat, no matter how much weight I gain or lose.”

The DIEP procedure isn’t just for first time reconstructive patients. Even women who had a mastectomy many years ago can consider DIEP surgery to restore a natural, pleasing upper body contour. Dr. Merrell is especially sensitive to women who have had difficulty with reconstruction in the past and suffer from less than gratifying—in some cases, disastrous—results. He talks about these patients with great passion, noting one patient who came to see him with a breast literally slowly dying from the inside following a failed TRAM procedure. “I nearly wept when I saw her,” he remembers, “because the tissue I could have used had been taken by the TRAM flap, which died. She was left with a huge abdominal hernia as well. But she isn’t giving up, and we won’t either. Her new reconstruction is in progress, and she already feels better.”

Dr. Merrell knows there are many women who have given up, due to bad experiences, poor outcomes or both. He wants to make sure these women and their health care providers know that there are often many effective options still available to them, which may include the DIEP.

He points out that some women may not be candidates for the DIEP flap procedure. “Women who smoke heavily, patients who are morbidly obese, or those whose DIEP vessels have been compromised by previous surgery, are generally not candidates for the DIEP,” he says. “Some women choose implants because the surgery itself is much shorter, or because they have too little abdominal fat with which to construct a breast or breasts.” He adds, “Women facing the loss of one or both breasts, or who have had poor or failed previous reconstruction, should become knowledgeable about all options and then make an informed decision.”

There’s another thing Dr. Merrell wants to be sure women, their care providers and families understand. “If you have breast cancer,” he emphasizes, “by federal and state law, your insurance company cannot deny you benefits for a reconstruction of your choice. This includes operations on both breasts as needed to be symmetrical and balanced.”

Patients tell their own stories.

MB had just turned 40 when she was diagnosed with cancer. She did extensive research and knew there was no saving her breast. Her doctor referred her to Dr. Merrell, who, she recalls, “opened his office to see me after hours. That’s how dedicated he is.”

Dr. Merrell recalls that she had “a thousand questions.” She recalls that he took the time to answer each of them, noting “I always had his undivided attention. I needed a lot of support, and he gave me all I needed.”

Following reconstruction using the DIEP technique, MB says she’s “so glad I went this route. I tell everybody Dr. Merrell is my hero. After all my research, I never considered going out of state; never considered anyone other than Dr. Merrell.”

JM was still in her 30s when she was diagnosed with invasive lobular carcinoma and underwent mastectomy. “I chose reconstruction, and I’d be lying if I said it wasn’t for vanity,” she says. “I wanted to look normal, partly because I have two young girls. I chose Dr. Merrell because of his reputation for excellence and compassion. And he was—I felt like he was giving me advice he’d give his mother or daughter.”

She had too little body fat for the DIEP procedure, so she chose silicone implants. In her words, “I love them. If you didn’t know what I had been through, you wouldn’t know I had reconstruction. My breasts look and feel real. I have normal looking cleavage and the size is perfect. I feel blessed this disease was caught in the early stages and that reconstruction is available. I like that, because I look normal, breast cancer has not controlled my life.”

SG, now in her 50s, lives in Alaska. Following her diagnosis, she underwent mastectomy with a teardrop shaped implant. She experienced pressure in her armpit, and noticed the implant seemed to have rotated and felt painfully hard. Discouraged when her surgeon advised against removing it, she Googled “reconstructive surgery” and discovered Dr. Merrell and the DIEP procedure.

She emailed his website, and remembers that “Within minutes, I got a phone call from him, and he talked to me for 45 minutes. I knew DIEP was what I wanted.” She and her husband flew from the Yukon to Hampton Roads.

When they met with Dr. Merrell, exhausted and apprehensive, “he walked over and gave me the biggest hug and told us everything was going to be OK.” Ten days later, after an 8-hour
microsurgery and three days recuperation in Obici Hospital, she was flying home, pain free and whole again.

Today she says, “I’m doing great. And it’s amazing - I’ve gained and lost weight over the past years, and my breasts get larger and smaller just like normal breasts would. Best of all, my stomach is still flat and tight!”

RO is a vibrant woman in her 60s who underwent a partial mastectomy in 1995, but later required bilateral mastectomies in 2003. She initially chose implant reconstruction. “Afterwards I was in a lot of pain,” she recalls, “so my surgeon took one implant out. It stayed out for a little over a year. I had an external prosthesis, and that was one of the worst parts of the whole experience.”

In 2005, she had a new implant placed in her left breast, “but it was considerably higher than the right breast. My surgeon kept trying to get my breasts symmetrical but he couldn’t. My left breast was very scarred – way up high and looked terrible. I was just miserable.”

A friend suggested she see Dr. Merrell before making any further decisions. “I met with Dr. Merrell, and he showed me the implants and told me I should at least consider the DIEP,” she says. He explained that problems with her pectoral muscles and scar tissue were causing her pain. She was just weeks shy of her 65th birthday when Dr. Merrell operated. She made one special request of him: she wanted to be able to go to Jamaica in December to have fun at the beach.

“People have asked me, ‘At your age, why bother?’ I had had discomfort for five years and I hated the scarring.” Today, this patient goes whitewater kayaking, runs, does yard work – all without discomfort, and with beautiful, natural looking breasts. She’s become an advocate for women educating themselves about all the options, and has even invited Dr. Merrell’s patients to her house to talk with them about her own experience. “The big thing,” she tells them, “is that you don’t have to settle – you have every right not to feel disfigured, no matter what your age.”

Oh, and about Jamaica and the beach . . . . as they say, one picture is worth a thousand words.

For more information, or to see photographs of Dr. Merrell’s remarkable work, visit www.plasticsurgeonforyou.com or call 757-673-6000. “Visit Us and See the Difference.”