

Plastic Surgery: Working through breast cancer

By DR. ALAN MUSKETT
Plastic Surgery

A diagnosis of breast cancer is life-changing. There is the initial tsunami of shock, fear and disbelief. Lives, jobs, family plans and activities come crashing to a halt as surgery and treatment plans take priority. The dizzying progress of breast cancer therapy has made treatment more effective - but also more nuanced and thus potentially more confusing. Decisions about surgery, radiation and chemotherapy can be overwhelming.

In the past, the initial treatment of breast cancer involved removing the breast. Breast conservation therapy, which is the removal of the breast tumor with postoperative radiation, has supplanted mastectomy (complete breast removal) as first-line treatment. However, there are instances in which mastectomy is the appropriate treatment. Mastectomy may be required to remove all the cancer. Some types of breast cancer are better treated with mastectomy. A woman may choose to avoid radiation or may feel more comfortable with complete breast removal.

When mastectomy is contemplated, or has been performed in the past, the question of breast reconstruction arises. This is a highly individual, personal choice. Some women have no interest in reconstruction, whereas others feel uncomfortable without a breast. The most important determining factor in that decision is how the patient feels - not a friend or relative or significant other or an article in a women's magazine. Any reconstruction method involves surgery and discomfort and patience, so don't do it for anyone other than you.

Breast reconstruction can be done at the time of the mastectomy or any time after. Some women wait 10 years before deciding to go ahead. Age doesn't matter, as long as a person's health is stable. Immediate reconstruction (at the time of mastectomy) works well as long as radiation isn't contemplated, as radiation is hard on healing tissues.

Most types of chemotherapy seem to be OK. If immediate reconstruction is planned, I meet with the patient a couple of times before the surgery to review the options and clearly delineate what can be expected. My goal is that the patient goes to surgery at peace with her decision and with confident knowledge of the plan ahead.

There are several choices in breast reconstruction. I ask my patients several questions when making this decision. How much of your time and body do you wish to invest in breast reconstruction? Some operations are big ones requiring hospitalization and incisions in other parts of the body. Have you had or are you anticipating radiation? What is your body shape, size, and what can we use for spare parts? How does this effort fit into the rest of your life? Where do you live and how much traveling are you able to do? What have you learned about breast reconstruction and what are your initial thoughts?

There are two broad categories in breast reconstruction. One group of techniques involves using only tissue from a person's body. Another group uses gel implants to help create a

breast.

The most common operation involving only native tissues is the TRAM (transverse rectus abdominus myocutaneous) flap. This involves the use of the rectus muscle (one of the abs) and its overlying muscle and skin. The artery feeding the muscle and skin is left attached for blood supply, and this tissue is moved up to the breast area.

The defect left behind is closed like a tummy tuck. The idea is to use excess tummy tissue to create a breast mound. It can create a natural-looking breast shape, doesn't involve an implant, and the donor incision is basically a tummy tuck. There are downsides to this otherwise attractive option.

It is a big operation involving a few days in the hospital. The relocated tissue has a somewhat tenuous blood supply, and occasionally the skin and fat will die, resulting in loss or partial loss of the flap. Removing the muscle from the abdomen can result in abdominal wall weakness or hernia formation. A more recent version of this operation uses just the fat and skin from the abdomen, leaving the muscle behind. This is called a perforator flap. The small arteries to this flap are sewn to an artery on the chest wall. This involves a microsurgical hookup of tiny vessels.

It is technically very demanding, and there is a risk of complete flap loss. It is one of those operations where it is great when it works and a total loss when it doesn't.

Using a back muscle and its overlying skin and fat is a workhorse in breast reconstruction. For small breasts on larger people, the flap does not require an implant. Surprisingly, moving the latissimus muscle does not cause much loss in function. The blood supply to this flap is hearty, and tissue loss is unusual. This is a good option when radiation has been used. The most frequent complication is fluid collection at the donor site, which can require aspiration with a syringe in the office. Combining a latissimus flap with an implant works well in patients who require more breast volume.

The most commonly performed reconstruction is the expander/implant method. After mastectomy a tissue expander is placed under the pectoralis muscle and its overlying skin. The expander is basically an empty balloon. Every two or three weeks fluid is added to the expander to stretch the skin and create a space for an implant. Once the desired shape and size are achieved, the expander is removed and a permanent implant is placed. This process takes several months but it is all done as an outpatient. No other incisions or procedures are required on other parts of the body. In the past, this procedure has been criticized as less natural-looking, but the recent use of tissue substitutes has allowed the procedure to produce a more natural breast shape. Drawbacks to this method are basically those involved with the use of an implant.

In a situation involving reconstruction of one breast, very often modification of the other breast is necessary to achieve symmetry. This usually involves lifting and/or augmenting the remaining breast. Patients with aging or drooping breasts will often find this appealing.

I find breast reconstruction very rewarding for several reasons. It is a very artistic, creative endeavor. I enjoy the extended relationship with the patient and her family, as we move from the anxiety of the initial situation to the excitement of a restored body image. It is an affirming step on the road to cancer recovery.

As a patient evaluating the treatment and reconstruction options, make sure you understand your choices. Keep asking questions until you are at peace with the plan. This area has a wonderful cancer treatment community, making it unnecessary to travel great distances to receive state-of-the-art care.