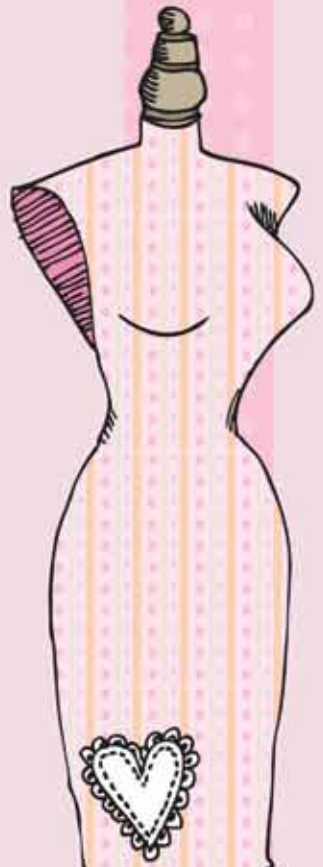




# Breast CAN

Saving and



"Studies following thousands of women for more than 20 years show that in appropriate patients, a mastectomy does not provide any better chance of survival than a lumpectomy."

# CER:

## Reconstructing Your Breast

**Patty Tenofsky, MD, FACS**

Surgery and Breast Care  
Wichita Clinic at Founders' Circle  
316-613-4707  
www.wichitaclinic.com



The surgical treatment options for breast cancer are vast, but when diagnosed many women automatically think that a mastectomy (removal of the entire breast) is necessary. Current treatment for breast cancer, however, allows preservation of the breast in the majority of situations. When diagnosed, women are usually offered two surgical options. One is a lumpectomy followed by radiation and the second is a mastectomy with or without reconstruction. Both options are possible because the survival from breast cancer is no different between these two surgical treatments. Studies following thousands of women for more than 20 years show that in appropriate patients, a mastectomy does not provide any better chance of survival than a lumpectomy. It's important to explore all the options available for removing a breast cancer and preserving the breast in the best cosmetic manner possible.

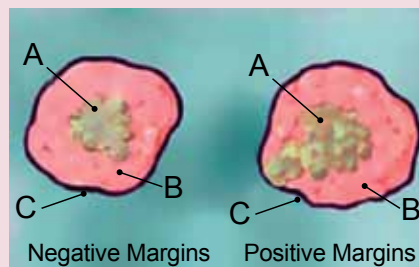
In the past, surgeons were required to perform radical, disfiguring operations because breast cancers were typically very large when diagnosed and radiation and chemotherapy were not as advanced. Chemotherapy and radiation treatments have certainly improved, but the best way to preserve the breast is to diagnose breast cancers in their earliest stages when they are still small. Screening mammograms help us identify cancers much sooner, leading to a decrease in the average size of a breast cancer identified at a woman's initial diagnosis. This has resulted in a decrease in the mortality of breast cancer patients since cancers are now identified at lower stages. From a surgical standpoint, identifying cancers when they are small allows a better chance to preserve the breast.

Lumpectomy is the removal of a breast cancer (whether it is an actual lump or a cancer that does not form a lump) and some normal surrounding breast tissue. With a lumpectomy the breast is preserved and therefore is often termed "breast-conserving" or "breast preservation" surgery. Many names are used for this technique including lumpectomy, partial mastectomy, quadrantectomy, or wedge resection. The lumpectomy incision may be placed in a variety of areas on the breast depending on the location of the cancer and how the incision will appear cosmetically.

One of the concerns or risks of a lumpectomy is that the cancer may not be completely removed at the time of surgery. This is identified as a poor, positive or involved margin. If a positive margin occurs, then more surgery will be needed, and this is termed a re-excision. Re-excision is required until adequate or negative margins are identified at surgery. (See Figure 1)

Women who have a lumpectomy may also have a decrease in normal sensation of their breast and nipple if the incision is near the nipple. Breast size and shape may differ after the surgery. Radiation treatment that is required after surgery may also shrink the breast slightly. There is also a risk of local recurrence with a lumpectomy. Local recurrence means that the breast cancer grows back in the breast or on the chest wall after the initial surgery to remove it. The risk of local recurrence in the breast after lumpectomy and radiation ranges between 5% and 15%. Higher local recurrence rates occur with closer margins, and more aggressive cancers. Having a mastectomy does not guarantee that there will be no local recurrence, but the

Figure 1



A: Breast Cancer B: Normal Tissue C: Margin of Excision

risk is slightly lower at around 1-2% depending on the cancer's stage and characteristics. There is no difference in the survival rate between the two surgical options

Lumpectomy is a fairly simple surgery when the breast cancer is small. In these situations a very small amount of tissue needs to be removed and the breast shape and size will change very little.



The surgery becomes more difficult when the cancer is larger. The larger the portion of breast removed, the more likely it is that there will be a noticeable change in the shape of the breast afterward. A newer technique termed oncoplastic surgery uses plastic surgery principles to reconstruct the breast tissue after a lumpectomy is performed in order to improve the cosmetic result. Plastic surgery techniques can be used to remodel the conserved breast, and also change the opposite breast by reducing, lifting or re-shaping to achieve better symmetry so that the breasts are the same size and shape.

One of the newer options available to preserve the breast in larger breasted women (cup size D or larger) is a reduction lumpectomy. This can also provide increased comfort in women who experience back or shoulder pain due to heavy breasts. In this procedure, a very large portion of the breast is removed allowing the surgeon to remove the cancer while cosmetically reducing and lifting the breast. The breast is then reconstructed in the same manner as a breast reduction is performed. The other breast is reduced so that both are symmetric. Radiation therapy for large-breasted women can be difficult, with complications that include skin breakdown, chronic swelling, and tenderness. Breast reduction can reduce these radiation complications, and is therefore a second advantage to this procedure.

When a woman's breast is not large enough to perform a simple lumpectomy or the reduction surgery described above, there is another option for her breast cancer. She may be able to take chemotherapy before her surgery (called neoadjuvant chemotherapy). The chemotherapy may shrink her cancer enough to allow a lumpectomy to be performed. This option is appropriate only in women who will definitely require chemotherapy.

After neoadjuvant chemotherapy, a lumpectomy will be performed to remove any remaining cancer cells. The patient will then have a very good chance of preserving her breast, even though there was no chance of lumpectomy prior to chemotherapy. Overall, chemotherapy before surgery can preserve as many as 30-50% of breasts that would have typically required mastectomy. The percentage of breast conservation may improve over time as better chemotherapy options become available. Remember, however, neoadjuvant chemotherapy is only an option for large invasive cancers that require chemotherapy. It is not an option for noninvasive cancers, and is not typically an option for smaller invasive cancers.

Lumpectomies cannot be performed in certain situations. Women who have already had radiation to the chest for another cancer cannot be given radiation

twice in the same area. Without radiation after a lumpectomy the risk of breast cancer recurrence is too high and a mastectomy is recommended. If there are two or more cancers separated by a large distance or extensive cancer in multiple areas in the same breast, then a mastectomy is recommended. If removing the tumor will significantly disfigure the breast and shrinking the tumor with chemotherapy is not recommended, then a mastectomy with reconstruction may be recommended. If multiple attempts to remove the cancer have been tried, but clear margins cannot be obtained, then a mastectomy is warranted. Radiation may not be recommended in a woman who has a connective tissue disease such as scleroderma or lupus because they may be more sensitive to the side effects of radiation. Radiation is not recommended for pregnant women.

Despite the above limitations for breast preservation, the majority of women with breast cancer are candidates for a lumpectomy. Between 75 and 80% of women who are currently diagnosed with breast cancer have discovered it at an early stage thanks to broad screening with mammograms. Breast cancer experts agree that most early-stage breast cancer can be treated with a lumpectomy followed by radiation as safely as mastectomy. Up to half of the women who fit into this category will still choose to undergo a mastectomy. The reasons for this vary, but are often related to fear of cancer recurrence or fear of radiation.

The risk of local recurrence in a lumpectomy with good margins that has had follow-up radiation is between 5-7%. The risk of local recurrence with a mastectomy is 1-2%. There is NO difference in survival rate and if a local recurrence happens, then a completion mastectomy is recommended in most situations. Some women choose mastectomy because they fear the side effects of radiation. Radiation therapy may have risks, but the side effects are usually mild and include skin irritation and fatigue.

When a woman diagnosed with breast cancer is trying to decide between a lumpectomy and mastectomy, she should gather the facts and take time to carefully weigh her surgical options. It's important that her breast cancer surgeon discuss breast preservation and mastectomy in detail with her. Some women are counseled that they must have a mastectomy because there is an oncologic (cancer) reason, a cosmetic reason, or a medical reason that does not allow preservation of the breast. Women who have a choice may initially be inclined to remove the breast because that is where the cancer originated. The fact is that in most breast cancers, mastectomy does not give a better chance of long-term survival or a better outcome from treatment. It is estimated that between 70 and 80% of women who are currently diagnosed with breast cancer can safely preserve their breast.

