

Surgery: Lumpectomy and Mastectomy

Almost all women with breast cancer will have **surgery** treatment. Surgery removes as much cancer as possible. The kind of surgery depends on your unique situation, like the size of the tumor and whether or not it is spreading. The surgery decision also depends on what is acceptable to you and to your doctor.

It is common that patients seek a second doctor's opinion before having surgery.

There are many different terms used to describe the kinds of surgery, but there are really two main kinds:

- **Lumpectomy** is an operation that removes the lump and some tissue around it. The whole breast is not removed. Lumpectomy usually does not significantly change the physical appearance of the breast. Lumpectomy is sometimes called "breast-saving surgery".

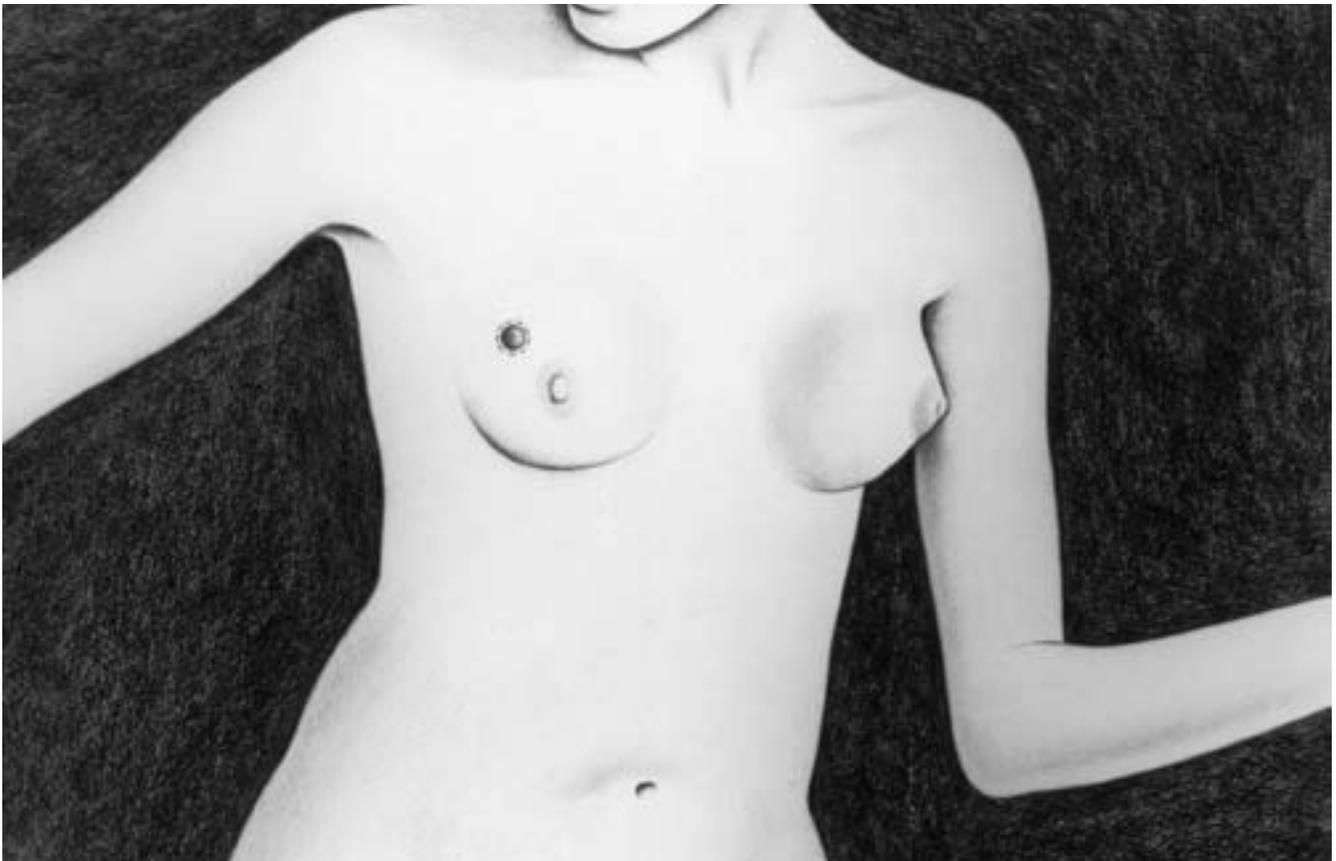


Image Source: National Cancer Institute; Donald Gates, Artist

- **Mastectomy** is an operation that removes the whole breast. The breast can usually be rebuilt in most cases after mastectomy, if the patient chooses.

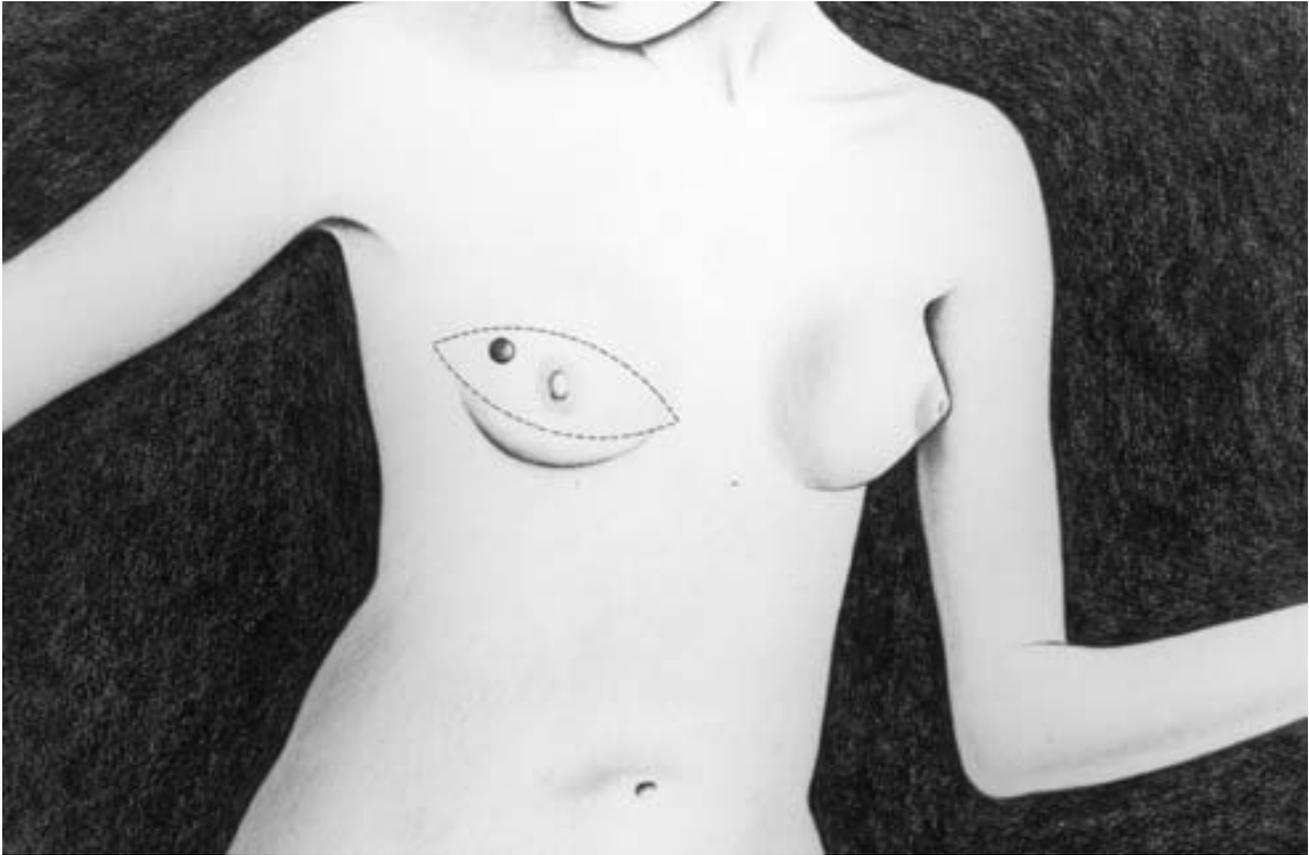


Image Source: National Cancer Institute; Donald Gates, Artist

During lumpectomy or mastectomy, lymph nodes may be removed through a separate cut. Following surgery, other types of treatments such as hormonal therapy or chemotherapy may be used to prevent cancer spreading in the body.

Larger cancer or cancer that has spread is usually treated by mastectomy. Sometimes, larger cancer is treated by lumpectomy if chemotherapy shrinks the cancer before surgery. Breast cancer that is small (four centimeters or less) can usually be treated successfully either by mastectomy or by lumpectomy combined with radiation.

There are advantages and disadvantages to both kinds of surgery. For example, lumpectomy may keep the physical appearance of the breast but usually requires six to seven weeks of daily radiation therapy beginning a month after surgery. Mastectomy may reduce the breast cancer coming back to the same breast, but a patient will have to choose whether or not they wish to have breast reconstruction after the breast is removed.

Some patients with smaller breast cancers have the option for lumpectomy but may still choose mastectomy for personal reasons. Your doctor can discuss your options and the pros and cons of either surgery. For some women, keeping their breast is very important. For some women, keeping their breast is not as important as other factors, like avoiding the time and side effects of radiation, and a small risk that the cancer will return to the remaining breast tissue.

Sometimes after a lumpectomy, your doctor recommends more surgery called a "re-excision". This surgery cuts back into the area where you had a lumpectomy and takes out the tissue that used to surround the tumor. Your surgeon will do this if cancer cells are found close to the edge of the tissue removed during the first surgery. It is important to remove an area of cancer-free tissue surrounding the original tumor, to be sure that all the cancer is gone. You may hear your surgeon refer to this as "clearing the margins." This is a common procedure.

If the first attempt to get a clear margin is unsuccessful, doctors may try the procedure one or two more times. If they are unable to obtain clear margins, then mastectomy is required. Sometimes it can be difficult to control the spread of breast cancer, and mastectomy may be the only option to try to remove all of the disease.

For lumpectomy, the patient receives medication to relieve pain and anxiety. The breast area may be numbed, the patient may remain awake and receive medication to make them feel calm, or the patient may be given medication to sleep and feel nothing during surgery. The surgeon makes a small cut near the breast tumor and cuts out the lump with a margin of normal surrounding breast tissue. Lumpectomy patients usually spend one to two days in the hospital.



Common side effects after lumpectomy are temporary swelling of the breast, breast tenderness, hardness due to scar tissue, and fluid trapped in the wound. Common side effects after radiation are fatigue and skin rash or redness in the treated area. Most of these side effects are temporary. Most women can do normal activities within 2 weeks. The full healing and formation of scar tissue happens over months, so the final look of the breast may not be seen for some time.

For mastectomy, the patient receives medication to sleep during the surgery. Mastectomy with lymph nodes taken out from the armpit usually lasts between 2-3 hours. The patient's heart rate and blood pressure are monitored during the surgery. The surgeon makes an incision along the outer boundary of the breast closest to the tumor area. Most of the skin is left. Often the nipple is not removed, but the milk ducts that lead to the nipple are cut. The tissue under the skin is gently cut free and removed. A plastic or rubber tube is put into the area to remove fluid and blood during healing. The tube is usually removed within two weeks. The skin is carefully closed with stitches or clips, which are usually removed within a week. A bandage covers the surgery site. There is usually a scar line left after healing. Mastectomy patients usually spend one to three days, sometimes longer, in the hospital. The patient



is only in the hospital for a week when they have a complicated reconstruction, where tissue is transplanted from another body area.

Common side effects after mastectomy are blood trapped in the wound, clear fluid trapped in the wound, and temporary to permanent limitations of arm/shoulder movement. The area where the breast was may remain numb. After mastectomy, many women experience feelings or pain in the area where the breast used to be, even though the breast is not there. Patients should report the pain to their doctors so they can receive help for relieving the pain.

Some women who have a mastectomy choose to have their breast rebuilt. There are many different procedures for creating a new breast mound. You should talk to your doctor before your surgery to discuss options. Sometimes the breast reconstruction surgery happens immediately following mastectomy. Sometimes it needs to happen at a later time. Some patients choose reconstruction. Some patients prefer to do nothing, or have a reduction of the other breast, or have "prosthesis". Prosthesis is an artificial breast form that slips into a special bra or bathing suit to give the appearance of a breast. The prosthesis is fitted to match the opposite breast.

If lymph nodes are removed during the operation, there may be numbness in the upper arm skin. Then for some time after surgery the patient should rest their arm and also keep it above the heart for a few hours to prevent arm swelling. The patient should limit hard exercise to avoid injury to the arm and surgery area while it heals.