

## Surgery for Breast Cancer: Types, Procedure, and Recovery

Surgery is often a central part of breast cancer treatment. Whether to remove a tumor, reduce the risk of cancer spreading, or reconstruct the breast, surgical options vary based on the type, stage, and individual considerations for each patient. Below, we'll discuss the types of breast cancer surgery, what to expect during the procedure, and recovery afterward.

### Types of Breast Cancer Surgery

Breast cancer surgery typically falls into two main categories: breast-conserving surgery and mastectomy. Additionally, some patients may opt for reconstructive surgery, either during the initial procedure or afterward.

#### 1. Breast-Conserving Surgery (Lumpectomy)

- **How It Works:** Also called a lumpectomy or partial mastectomy, breast-conserving surgery removes the cancerous tumor and a small margin of surrounding tissue while preserving most of the breast. This is usually done under the guidance of Savi scout. A Savi scout is tracer that is left within the tumor. This is placed by the radiologist prior to surgery which helps localize the tumor.
- **Ideal For:** Patients with early-stage breast cancer or smaller tumors.
- **Effectiveness:** When combined with radiation therapy, lumpectomy can be as effective as mastectomy for many early-stage breast cancers.

#### 2. Mastectomy

- **How It Works:** A mastectomy removes the entire breast tissue. There are several types, including:
  - **Simple or Total Mastectomy:** Removes the breast tissue without removing lymph nodes.
  - **Modified Radical Mastectomy:** Removes the entire breast along with axillary (underarm) lymph nodes.
  - **Radical Mastectomy:** Rarely used today, this surgery removes the breast, chest wall muscles, and all axillary lymph nodes.
- **Ideal For:** Patients with larger or multiple tumors, those with genetic predispositions (like BRCA mutations), or those who prefer mastectomy over breast-conserving surgery.
- **Effectiveness:** Mastectomy is highly effective at reducing the risk of recurrence in the breast tissue.

#### 3. Sentinel Lymph Node Biopsy and Axillary Lymph Node Dissection

- **Sentinel Lymph Node Biopsy:** During this procedure, the surgeon removes a few of the first lymph nodes to which cancer cells are likely to spread. If cancer is found, further lymph node removal may be necessary.
- **Axillary Lymph Node Dissection:** If cancer is found in the sentinel nodes, additional lymph nodes may be removed to reduce the risk of cancer spread.
- **Purpose:** Both procedures help determine whether cancer has spread beyond the breast.

## 4. Breast Reconstruction Surgery

- **How It Works:** After a mastectomy or lumpectomy, some patients opt for breast reconstruction to rebuild the shape and appearance of the breast. Reconstruction can use implants or autologous tissue (tissue taken from another body area).
- **Timing:** Some patients have reconstruction at the time of their mastectomy (immediate reconstruction), while others may wait until after additional treatments like chemotherapy or radiation (delayed reconstruction).

## Preparing for Breast Cancer Surgery

Before surgery, you'll meet with your surgical team to discuss the details of your procedure, any additional treatments needed, and preparations for recovery. Here are a few steps involved:

1. **Preoperative Testing:** Your doctor may order imaging tests, blood work, and a physical exam to evaluate your health and plan your surgery.
2. **Medication Adjustments:** If you take certain medications, especially blood thinners, your doctor may advise you to stop or adjust them in the days leading up to surgery.
3. **Planning for Recovery:** Arrange for someone to accompany you on the day of surgery, help you at home, and support you during recovery. It's also helpful to have comfortable clothing and any post-surgical supplies (like special bras or bandages) ready.

## The Procedure: What to Expect

Breast cancer surgeries are generally performed under general anesthesia. The specific details vary depending on the type of surgery:

1. **Incisions and Tumor Removal:** For a lumpectomy, the surgeon makes an incision over the tumor, removes it, and closes the incision. In a mastectomy, the entire breast tissue is removed through one or more incisions, which may extend to include lymph nodes if necessary.
2. **Lymph Node Evaluation:** If a sentinel node biopsy or axillary dissection is part of the surgery, the surgeon will remove lymph nodes in addition to the tumor or breast tissue.
3. **Reconstruction (If Chosen):** If you've opted for immediate breast reconstruction, a plastic surgeon may perform reconstruction during the same surgery as the mastectomy. Techniques vary and may involve implants or autologous tissue grafts.
4. **Closure and Bandaging:** Once the necessary tissue is removed, the surgeon will close the incisions and apply bandages or a surgical bra to support healing.

The length of surgery varies depending on the type and complexity of the procedure, but it typically lasts between one and three hours.

## Hospital Stay

Many lumpectomy procedures are outpatient, meaning you can go home the same day. Mastectomies, especially with reconstruction, may require a one- to two-day hospital stay. Here's what to expect during your hospital stay:

- **Immediate Recovery:** After surgery, you'll be monitored in a recovery area as you wake up from anesthesia.
- **Pain Management:** You'll receive pain medication to keep you comfortable. For mastectomies, pain management may include oral medications or local anesthetic injections.
- **Drain Placement:** Some surgeries involve placing surgical drains to remove fluid buildup. These drains are usually removed in your doctor's office within a week or two.
- **Discharge Instructions:** Nurses will provide instructions on caring for the surgical site, managing any drains, and medications. You'll need someone to drive you home and assist you in the early days of recovery.

## Recovery at Home

Recovery times vary depending on the type of surgery and individual factors, but here are some general guidelines:

1. **Rest and Limit Activity:** Limit lifting, stretching, and strenuous activities until cleared by your doctor. Walking and light activity are encouraged to promote circulation.
2. **Pain and Discomfort:** Pain and soreness are common, especially for mastectomy patients. Over-the-counter or prescribed pain medications can help, along with ice packs or gentle heat as recommended.
3. **Incision and Drain Care:** Keep the incision area clean and dry, and follow any instructions regarding surgical drains.
4. **Lymphedema Prevention:** If lymph nodes were removed, your doctor may advise exercises, compression garments, or physical therapy to prevent or manage lymphedema (swelling in the arm or chest).
5. **Emotional Support:** Recovering from breast cancer surgery can be emotionally challenging. Support groups, counseling, or talking to loved ones can be helpful during this time.

## Follow-Up and Additional Treatments

Your doctor will schedule follow-up visits to monitor healing and discuss any further treatments that may be needed, such as:

- **Radiation Therapy:** Often recommended after a lumpectomy to target any remaining cancer cells and reduce the risk of recurrence.
- **Chemotherapy:** May be recommended based on the size, type, or spread of the cancer, either before or after surgery.
- **Hormone Therapy or Targeted Therapy:** For cancers that are hormone receptor-positive or HER2-positive, these treatments can help reduce the risk of cancer recurrence.

## Potential Risks and Complications

Breast cancer surgery is generally safe, but all surgeries carry some risks. Potential complications include:

- **Infection:** Keep the surgical site clean and dry to reduce the risk of infection.
- **Bleeding or Hematoma:** Some bleeding is normal, but heavy bleeding or blood pooling (hematoma) may require further treatment.
- **Scarring and Numbness:** Scarring is common, and some patients experience numbness or tingling around the incision area.
- **Lymphedema:** If lymph nodes were removed, you may be at risk of lymphedema, which causes swelling in the arm or chest area.

## When to Contact Your Doctor

Contact your healthcare provider if you experience any of the following after surgery:

- Fever over 100.4°F (38°C)
- Redness, swelling, or discharge from the incision site
- Persistent or severe pain
- Increased swelling or fluid buildup around the incision
- Any other unusual symptoms or concerns

## Conclusion

Surgery is a key part of breast cancer treatment, offering various approaches to meet each patient's unique needs. Understanding what to expect before, during, and after surgery can help you feel more prepared and supported. By following your doctor's instructions and prioritizing self-care, you'll be on the path to healing and recovery. Remember, support groups and counseling can provide additional comfort and help during this time, as you take positive steps toward your health and well-being.