Caring for the Patient with Breast Cancer

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UNC LINEBERGER
UNC CANCER NETWORK

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Objectives

- Identify modalities of breast cancer treatment; medical, surgical, and radiation oncology
- Demonstrate knowledge concerning standard chemotherapy for patients in treatment for breast cancer
- Explain the use of aromatase inhibitors and Tamoxifen in the hormone receptor positive breast cancer patient.
- Differentiate surgical management of breast cancer patient to include diagnostic vs screening mammograms, biopsies, excisional biopsy, lumpectomy, mastectomy, lymph node management and lymphedema prevention, and management.
- Discuss financial toxicity of the breast cancer patient receiving treatment for newly diagnosed disease or who are metastatic

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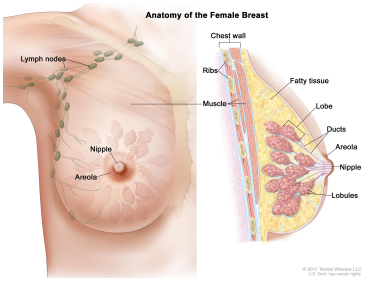
Definition

Breast cancer is a disease in which malignant (cancer) cells form in the tissues of the breast.



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Incidence and Survival of Breast Cancer

Estimated New Cancer Cases* in the US in 2016

	Males 841,390	Females 843,820	
Prostate	21%	29%	Breast
Lung & bronchus	14%	13%	Lung & bronchus
Colon & rectum	8%	8%	Colon & rectum
Urinary bladder	7%	7%	Uterine corpus
Melanoma of skin	6%	6%	Thyroid
Non-Hodgkin lymphoma	5%	4%	Non-Hodgkin lymphoma
Kidney & renal pelvis	5%	3%	Melanoma of skin
Oral cavity & pharynx	4%	3%	Leukemia
Leukemia	4%	3%	Pancreas
Liver & intrahepatic bile duct	3%	3%	Kidney & renal pelvis
All other sites	22%	21%	All other sites

*Excludes basal cell and squamous cell skin cancers and in situ carcinoma except urinary bladder.

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Incidence and Survival of Breast Cancer

Estimated Cancer Deaths in the US in 2016

	Males 314,290	Females 281,400	
Lung & bronchus	27%	26%	Lung & bronchus
Prostate	8%	14%	Breast
Colon & rectum	8%	8%	Colon & rectum
Pancreas	7%	7%	Pancreas
Liver & intrahepatic bile duct	6%	5%	Ovary
Leukemia	4%	4%	Uterine corpus
Esophagus	4%	4%	Leukemia
Urinary bladder	4%	3%	Liver & intrahepatic bile duct
Non-Hodgkin lymphoma	4%	3%	Non-Hodgkin lymphoma
Brain & other nervous system	3%	2%	Brain & other nervous system
All other sites	24%	24%	All other sites

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Symptoms and Signs of Breast Cancer

- Lump or change in the breast.
- Swelling (even if no distinct lump is felt)
- Skin irritation or dimpling
- Breast or nipple pain
- Nipple retraction (turning inward)
- Redness, scaling, or thickening of the nipple, areola and/or breast skin
- Nipple discharge (other than breast milk)

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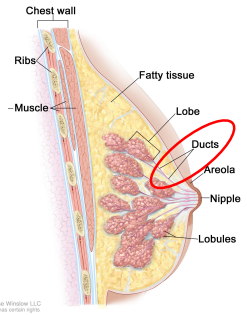
Types of Breast Cancer

Ductal Carcinoma



Ductal Carcinoma in situ (DCIS)
Abnormal cells are found only in the lining of the breast duct.

Invasive Ductal Carcinoma
Cancer spreads outside the breast duct to surrounding normal tissue.

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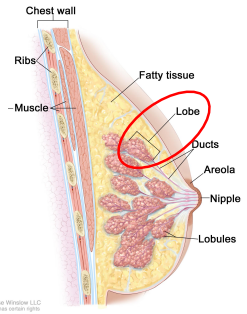
Types of Breast Cancer

Lobular Carcinoma



Lobular Carcinoma in situ (LCIS)
Abnormal cells are found only in the lobes of the breast.

Invasive Lobular Carcinoma
Cancer spreads outside the lobes to surrounding normal tissue.

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Types of Breast Cancer

Inflammatory Breast Cancer

- Uncommon.
- Breast is warm, red, and swollen
- Skin of breast may also show a pitted appearance.

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Risk Factors

- A family history of breast cancer and other factors increase the risk of breast cancer.
- Breast cancer is sometimes caused by inherited gene mutations (changes).
- The use of certain medicines and other factors decrease the risk of breast cancer.

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Genetics as part of treatment, just a word…

Genetic testing to determine mutation

Genetic testing to determine need for prophylactic surgery

Genetic testing for future generations

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Screening Options
Clinical Breast Exam (CBE)

An exam of the breast by a doctor or other health professional.

CHECK FOR:
Lumps & Physical Changes

GOAL:
Early Detection

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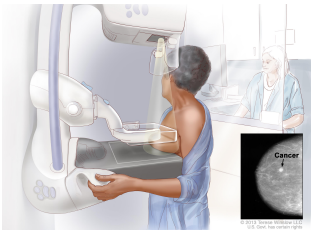
Screening Options
Mammogram

Mammogram, an x-ray of the breast, is the most common screening test for breast cancer.



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Screening Options
Magnetic Resonance Imaging (MRI)

Procedure that uses magnets, radio waves, and computers to make a series of pictures of areas inside the body.

Used with women who have one or more of the following:

- Gene changes (*BRCA1 or BRCA2*)
- Family history of breast cancer
- Genetic Syndromes (*Li-Fraumeni, Cowden Syndrome)*

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Diagnosis

- Tests that examine the breasts are used to detect (find) and diagnose breast cancer.
- If cancer is found, tests are done to study the cancer cells.

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Vocabulary

- **Staging**: process to determine type of cancer but also to determine if there is breast cancer elsewhere in the body.
- **Phenotype**: specific characteristics of breast cancer
- **ER**: estrogen receptor, negative or positive?
- **PR**: progesterone receptor, negative or positive?
- **HER 2 neu**: a protein normally found in the body but can be a prognostic indicator for treatment

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Vocabulary

- **Grade**: the degree to which the cancer cells look like the original tumor. 1, 2, 3
- **Tumor staging system**: T (tumor)
  N (node)
  M (metastatic)

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Staging

- Cancer can spread through tissue, the lymph system, and the blood.
- When cancer spreads to another part of the body, it is called metastasis
  - A metastatic tumor is the same type of cancer as the primary tumor.

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Staging

- The process used to find out whether the cancer has spread within the breast or to other parts of the body.
- Information gathered during staging determines the state of the disease and informs the plans for treatment.

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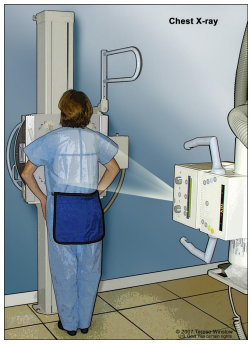
Staging
Tests and Procedures



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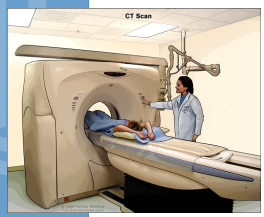
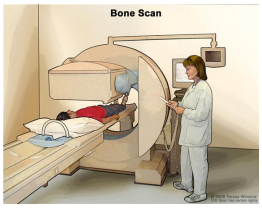
STAGING





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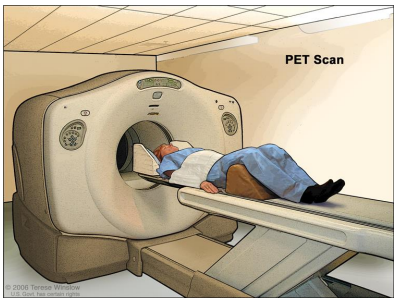
Staging
Tests and Procedures



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Stages of Breast Cancer

- Stage 0 (carcinoma **in situ**)
- Stage I
- Stage II
- Stage IIIA
- Stage IIIB
- Stage IIIC
- Stage IV

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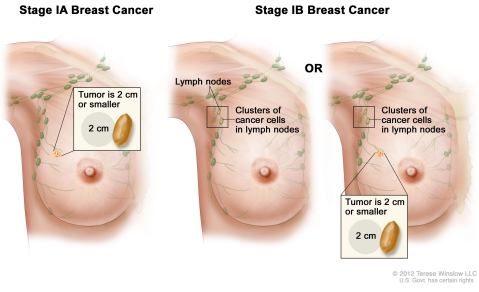
Stages of Breast Cancer
Stage I



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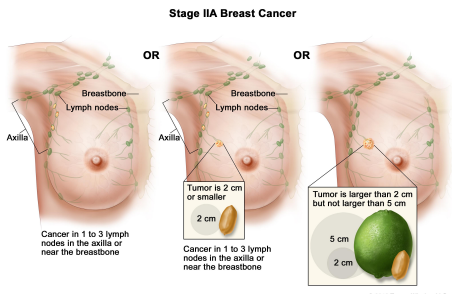
Stages of Breast Cancer
Stage II



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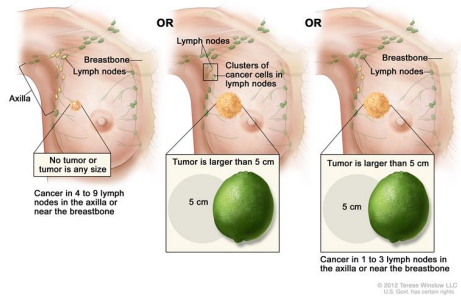
Stages of Breast Cancer
Stage IIIA



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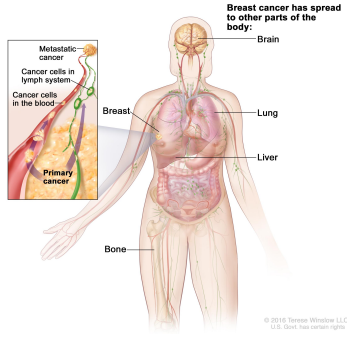
Stages of Breast Cancer
Stage IV



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Treatment Options

There are five types of standard treatments used for breast cancer:

- Surgery
- Radiation Therapy
- Chemotherapy
- Hormone Therapy
- Targeted Therapy

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Patient Characteristics to Consider in Treatment Decisions

- Comorbidity very important to consider:
- Renal function, liver function, baseline lab reports
- Body habitus for surgical or radiation consideration

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Imaging

- **Diagnostic mammo – standard after screening mammo detects abnormality**
- **3D tomosynthesis diagnostic mammo – "The conclusion is that digital breast tomosynthesis finds more of the invasive, harmful cancers and saves women the anxiety and cost of having additional screenings for what turns out to be a false alarm" (Morris E 2017)**
- **MRI – high resolution to confirm, or detect in high risk women**
- **Ultrasound – must have US correlate in order to biopsy, if US is discordant with mammo, will have MRI to confirm**

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Biopsy

- Core needle biopsy – tissue numbed w/local, incision made, core needle removes several slices tissue, geometric (such as ribbon, heart) clip is placed (marker for later use), mammo confirms clip, incision closed with steri-strip, specimen goes to pathologist for diagnosis, 3-5 days to dx
  - *only representation of tumor, sometimes there is more there than known* surgical pathology is the official diagnosis
- Stereotactic – lie on stomach with breast falling through a hole, for women with difficult to visualize mass/lesion, or multiple calcifications – no clear mass
- MRI guided – dense breast, suspicious area not seen on mammo
- Tomosynthesis guided – if tomo detected will be tomo guided biopsy
- Surgical biopsy – OR procedure, light sedation, excision of entire margins of lesion for definitive diagnosis when core biopsy is discordant with imaging

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Local Control

- Lumpectomy
- Mastectomy
  - Total/Simple
  - Skin sparing
  - Nipple sparing
  - Modified radical
  - Radical

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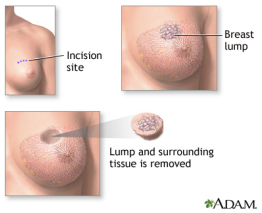
Lumpectomy

WHAT IS REMOVED:
- tumor only with some tissue around the margins

WHO MAY HAVE IT:
- single tumor less than 5cm (or two small tumors that can be bracketed)
- will have good cosmetic appearance without running risk of leaving tumor cells behind
- will follow up with radiation



https://medlineplus.gov/ency/imagepages/17030.htm

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Lumpectomy: radiographic guidance

- SAVI Scout localized: new standard
  - may remain indefinitely, placed after bx proven anytime
- Wire localized: old standard
  - placed day before or day of surgery, may delay surgery start, may migrate, anxiety

https://www.chestercountyhospital.org/news/featured-articles/2017/september/new-approach-to-scouting-breast-tumors

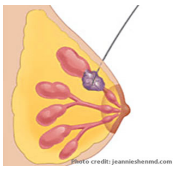

Photo credit: jeannieshenmd.com

http://coinme.pw/excision-biopsy-with-wire-localization.html

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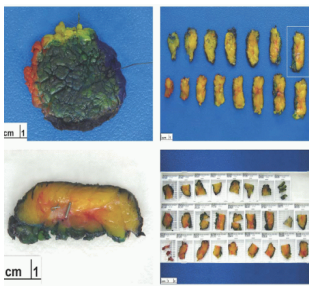
Lumpectomy: Margins

- A pathology report is run after the tumor is inked and placed into formalin
- Any tumor on the ink in the report is considered a **positive margin** and considered a risk for recurrence unless treated
- Surgical Path report takes 7-10 days turn around
- Treatment for positive margin may mean a re-excision
- Permanent ink: yellow, superior; green, anterior; black, inferior; orange, medial; blue, lateral



HODA, S. A., & RESETKOVA, E. (2016, june 5). Retrieved from Basic Medical Key

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Mastectomy

Candidate if...

- multifocal cancer or widespread disease or diffuse micro calcifications
- radiation therapy contraindicated
- inflammatory breast cancer
- large tumor, >5 cm, small native breast
- prophylactic mastectomy for gene mutations, risk reduction
- history of lumpectomy with radiation
- for symmetry in non cancer breast
- for emotional benefit and reassurance in early stage breast cancer
- repeat positive margins after lumpectomy re-excision

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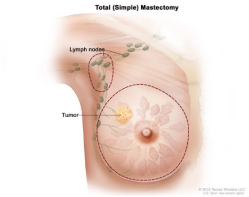
Total Mastectomy

What is removed: tumor, entire breast, skin over breast, nipple areola complex, and tail of spence.

What is not removed: muscle, and lymph nodes



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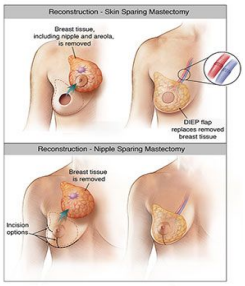
Skin Sparing Mastectomy

- Skin Sparing - breast tissue, nipple and areola are removed
- Nipple sparing – breast tissue removed, but skin, nipple and areola are left in place
  - Risk – nipple necrosis, sensations decreased, misplaced nipple, risk for recurrence if not done properly
- Skin left intact to be used for envelope for breast implant, or reconstruction
- Not candidate if tumor is large, or risk for cancer cells in skin, nipple, or areola -would put you at risk for local recurrence
- Preferred for a more natural look. Breast skin is soft and smooth compared to skin elsewhere on body



https://bcdieptlap.com/surgery/

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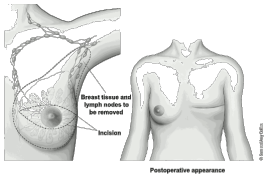
Modified Radical Mastectomy

- Historical standard of care
- Now used for patients needing mastectomy with known axillary lymph node involvement.
- Removes all axillary LN, level 1 and 2, plus skin, entire breast tissue down to pectoralis major muscle, nipple areola complex, and lining over the chest muscle
- Muscle is spared
- JP drains X 2
- Higher risk for lymphedema, seroma, hematoma
- 24 hour extended stay
- 3-4 weeks recovery



Modified radical mastectomy

https://www.cancer.org/cancer/breast-cancer/treatment/surgery-for-breast-cancer/mastectomy.html

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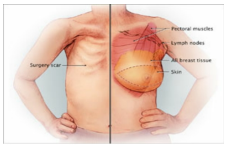
Radical Mastectomy

- Entire breast removed, level I,II and III and pectoralis muscle
- Rarely performed
- Used to be standard procedure for any breast cancer
- Common SE is lymphedema
- Large scar



http://www.ladycarehealth.com/risk-factor-and-prevention-of-breast-mastectomy-2/

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"Multiple randomized trials have demonstrated that breast-conserving therapy with partial mastectomy and radiotherapy provides survival equivalent to that seen with mastectomy for patients with early-stage breast cancer."

LUMPECTOMY

- Recovery 3-7 days
- Wound care –small incision w/dermabond, dissolvable sutures under skin; compression bra
- Shower next day
- Drive next day if not taking narcotics
- No lifting > 5 lbs until cleared by surgeon ~2 weeks
- Minimal pain, narcotics prescribed, Tylenol and ibuprofen works for most
- Surgery time - 1-1 ½ hour; minimal anesthesia; quick post operative recovery, same day surgery
- Must have clear margins; satisfactory cosmetic outcome
- Must follow with radiation; if no radiation, higher risk local recurrence

MASTECTOMY

- Recovery 2-4 weeks
- Wound care – dermabond, dissolvable sutures under skin, JP drain (2-3 weeks) to decrease, or prevent swelling, post-surgical bra
- Shower next day
- No driving with drain in, or if taking narcotics
- No lifting >5 lbs until cleared by surgeon ~2-3 weeks; no lifting arms above head which might put strain on incision
- Mastectomy site is numb; post-mastectomy phantom pain, narcotics prescribed, Tylenol and ibuprofen works for most
- Surgery time: 1 ½ - 3 hours, general anesthesia, longer recovery with overnight stay
- Possible delayed healing in diabetics, and smokers
- Chest wall will be without sensation, post mastectomy phantom pain; consider reconstruction vs flat
- No radiation unless tumor on margin/ink, positive lymph nodes, or tumor is larger than expected
- Lymph node interrogation even for stage 0 breast cancer due to risk for upstaging

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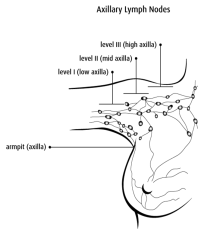
Lymph Node Management

- Sentinel Lymph Node Biopsy
- Axillary Lymph Node Dissection
- Axillary reverse mapping



https://www.cancer.ca/en/cancer-information/diagnosis-and-treatment/tests-and-procedures/axillary-lymph-node-dissection/?region=on

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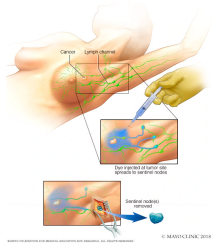
Sentinel Lymph Node Biopsy

- Sentinel – guardian of the lymph nodes.
- Identify, remove, and examine to determine if cancer is present in lymphatic system.
- Done in conjunction with tumor removal – lumpectomy, or mastectomy.
- Dual tracer to identify: radioactive tracer inj into breast near tumor, will drain pathway to LN from tumor. The first LN turns blue and those are the SLN
- If negative results, suggests cancer has not spread to other lymph nodes, or organs
- If positive results, suggests cancer has spread
- Low risk for lymphedema, 3-8 %
- Blue/green urine
- Numbness, nerve pain



https://www.mayoclinic.org/-/media/kcms/gbs/patient-consumer/images/2017/09/29/18/50/bc-3650984-001-8col.jpg

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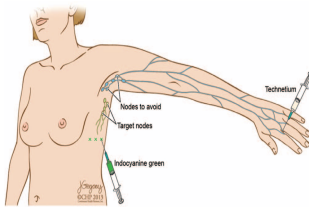
Axillary Reverse Mapping

- Technique used to identify lymphatics in arm that re draining from arm pit.
- Avoiding disruption of arm lymphatics during time of axillary lymph node surgery is being researched to determine if it will lower the risk of lymphedema.
- Blue dye injected into arm at time of surgery.
- Arm lymphatics turn blue. Avoid disrupting these lymphatics
- Reduces risk for lymphedema in SLN bx to 1-3%, and in ALND 4-9 %



https://www.semanticscholar.org/paper/Reverse-lymphatic-mapping%3A-a-new-technique-for-in-Dayan-Dayan/db5888ecda3f864c5eec46e5ba714239b6e73acb

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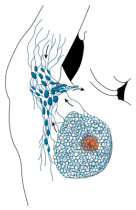
Axillary Lymph Node Dissection

- Levels I and II are removed when biopsy-proven breast cancer in axillary lymph node
  - To determine how much cancer has spread
  - Removing LN that contain cancer, or there is chance there might be cancer
  - Reduce risk for recurrence
  - Average of 10-40 are removed
- Remove lymph nodes after chemotherapy or radiation to remove any remaining cancer cells
- JP drain
- Risk lymphedema, seroma, swelling, numbness, cording, decreased range of motion



https://www.cancernetwork.com/breast-cancer/too-many-dcis-patients-get-axillary-lymph-node-dissection

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Side Effects of Breast Surgery

- **Seroma, hematoma, lymphedema** – fluid build up at site of surgery; serous fluid, blood, or lymph
- **Abscess** – infection in post-operative breast; red, hot, swollen breast, intense pain, fever
- **Numb/nerve pain** – temporary, or permanent where breast tissue removed; back of arm; traumatized nerves in axilla causing sharp shooting pain, throbbing sensations
- **Depression** – body image disturbance; effects of anesthesia
- **Post Mastectomy Phantom Pain**

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Lymphedema

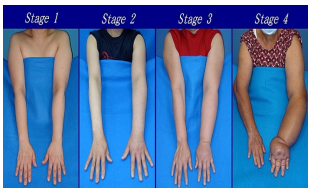
Definition: build up of lymph fluid in the skin from disruption in lymphatic system

Lymphatic system/Lymph nodes: Main filter for all foreign substances in the body which is distributed into the blood system for elimination.

Cause: any disruption to lymphatic system that causes lymph fluid to back up, or build up. Surgery, radiation, certain chemotherapeutic agents.

Result: swelling in extremity on side of lymph node damage that can range from mild discomfort to severe impact on quality of life, or cellulitis.

Treatment: PREVENTION! Compression sleeve, elevate extremity, lymphatic massage, compression pump, certified lymphedema specialist, antibiotics for cellulitis



https://en.wikipedia.org/wiki/Lymphedema

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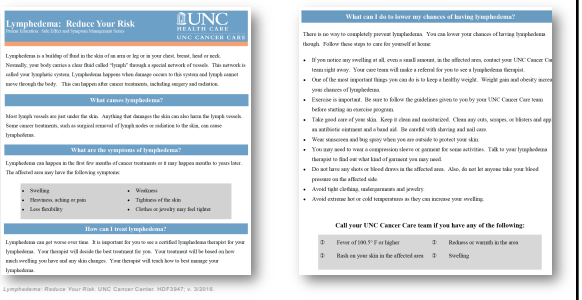
Patient Handout :: UNC Cancer Center



Lymphedema: Reduce Your Risk

UNC HEALTH CARE
UNC CANCER CARE

Lymphedema is a buildup of fluid in the skin of an arm or leg or in your chest, breast, head or neck. Normally, your body carries a clear fluid called "lymph" through a special network of vessels. This network is called your lymphatic system. Lymphedema happens when damage occurs to this system and lymph cannot move through the body. This can happen after cancer treatments, including surgery and radiation.

What causes lymphedema?

Most lymph vessels are just under the skin. Anything that damages the skin can also harm the lymph vessels. Some cancer treatments, such as surgical removal of lymph nodes or radiation to the skin, can cause lymphedema.

What are the symptoms of lymphedema?

Lymphedema can happen in the first few months of cancer treatments or it may happen months to years later. The affected area may have the following symptoms:

- Swelling
- Heaviness, aching or pain
- Less flexibility
- Weakness
- Tightness of the skin
- Clothes or jewelry may feel tighter

How can I treat lymphedema?

Lymphedema can get worse over time. It is important for you to see a certified lymphedema therapist for your lymphedema. Your therapist will decide the best treatment for you. Your treatment will be based on how much swelling you have and any skin changes. Your therapist will teach how to best manage your lymphedema.

Lymphedema: Reduce Your Risk. UNC Cancer Center. HDF3947; v. 3/2016.

What can I do to lower my chances of having lymphedema?

There is no way to completely prevent lymphedema. You can lower your chances of having lymphedema though. Follow these steps to care for yourself at home:

- If you notice any swelling at all, even a small amount, in the affected area, contact your UNC Cancer Ca team right away. Your care team will make a referral for you to see a lymphedema therapist.
- One of the most important things you can do is to keep a healthy weight. Weight gain and obesity increa your chances of lymphedema.
- Exercise is important. Be sure to follow the guidelines given to you by your UNC Cancer Care team before starting an exercise program.
- Take good care of your skin. Keep it clean and moisturized. Clean any cuts, scrapes, or blisters and app an antibiotic ointment and a band aid. Be careful with shaving and nail care.
- Wear sunscreen and bug spray when you are outside to protect your skin.
- You may need to wear a compression sleeve or garment for some activities. Talk to your lymphedema therapist to find out what kind of garment you may need.
- Do not have any shots or blood draws in the affected area. Also, do not let anyone take your blood pressure on the affected side.
- Avoid tight clothing, undergarments and jewelry.
- Avoid extreme hot or cold temperatures as they can increase your swelling.

Call your UNC Cancer Care team if you have any of the following:

- ☐ Fever of 100.5° F or higher
- ☐ Redness or warmth in the area
- ☐ Rash on your skin in the affected area
- ☐ Swelling

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Treatment Options
Chemotherapy

- Chemotherapy is a cancer treatment that uses drugs to stop the growth of cancer cells, either by killing the cells or by stopping them from dividing.
- The way the chemotherapy is given depends on the type and stage of the cancer being treated.
- Systemic chemotherapy is used in the treatment of breast cancer.

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How does chemotherapy work?

Systemic treatment that targets cells that grow and divide quickly.

This can lead to affects on fast-growing healthy cells like hair, skin, nails, GI tract and bone marrow

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Timeline of chemotherapy

Neoadjuvant: before surgery-large tumors, positive lymph nodes, highly proliferative tumors

Adjuvant: After surgery: based on pathology of tumor and risk

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Management of Treatment Side Effects

- Depends on which system is affected
- Can include medication management
- Often includes “tincture of time”

Image Source: Scientific American

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Treatment side effects chemotherapy

fatigue
nausea/vomiting/GI upset
decreased blood counts
diarrhea
alopecia
neuropathy
heart failure
premature menopause
mouth sores

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Treatment Options

Treatment that uses drugs or other substances to identify and attack specific cancer cells without harming normal cells.

- Monoclonal antibodies
- Tyrosine kinase inhibitors
- Cyclin-dependent kinase inhibitors
- Mammalian target of rapamycin (mTOR) inhibitors
- PARP inhibitors

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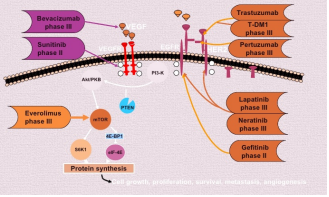
Targeted therapies

Targeted cancer therapies are drugs or other substances that block the growth and spread of cancer by interfering with specific molecules that are involved in the growth, progression and division of cancer cells

Targeted Agents for HER2+ Breast Cancer



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Biosimilar

A biological drug that is very much like another biological drug (called the reference drug) that has already been approved by the U.S. Food and Drug Administration (FDA). To be called a biosimilar drug, a biological drug must be shown to be as safe as, work as well as, and work in the same way as its reference drug. It must also be used in the same way, at the same dose, and for the same condition as the reference drug. Biosimilar drugs must be approved by FDA, and may cost less than the reference drugs

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PARP inhibitors

PARP inhibitors are used to treat cancers that have mistakes in their DNA repair genes (e.g. BRCA mutation).
Olaparib

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Treatment Options
Radiation Therapy

External Radiation Therapy
- Uses a machine outside the body to send radiation toward the cancer.

Internal Radiation Therapy
- Uses a radioactive substance sealed in needles, seeds, wires, or catheters that are placed directly into or near the cancer.

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Treatment Side Effects
Radiation Therapy

- Inflammation of the lung after radiation therapy to the breast.
- Arm lymphedema.
- Higher risk of developing breast cancer in the other breast.

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Treatment Options: Anti-Hormone Therapy

- A medication that is given to remove hormones or block their action, which stops cancer cells from growing
- Aromatase Inhibitors versus Tamoxifen

Image Sources: medicalnewstoday.com, breastcancer-news.com

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Anti-Hormone Therapy

- Aromatase Inhibitors are given to postmenopausal patients that have estrogen-receptor or progesterone-receptor-positive breast cancers
- Aromatase Inhibitors are also given to patients with metastatic disease, but in combination with targeted therapies
- Tamoxifen is given to patients with early localized breast cancer or metastatic breast cancer

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Anti-Hormone Therapy

- Megace: treats advanced-stage, hormone-receptor-positive breast cancer in women not responding to tamoxifen
- Fulvestrant: used in the metastatic breast cancer setting; injection

Image Source: patientlitigation.ch
Reference: breastcancer.org

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Anti-Hormone Therapy Side Effects

Aromatase Inhibitors
- Joint discomfort
- Hot flashes
- Vaginal dryness
- Osteoporosis
- Fatigue
- Weight gain
- Insomnia

Tamoxifen
- Similar to that of Aromatase Inhibitors
- Increased risk of blood clots/stroke
- Bone pain
- Mood swings
- Loss of libido
- Increased risk of endometrial cancer

Resources: breastcancer.org

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The rising cost of health care in the U.S. poses real problems to individual patients

- Health behaviors
  - Skipping, foregoing, delaying care
  - Non-adherence to doctor-recommended treatments
- Health-related outcomes
  - Higher stress, anxiety, depression
  - Worse quality of life
- Financial
  - Debt, inability to acquire loans
  - Medical bankruptcy

Special thanks to Jenny Spencer MSPH and team for allowing the use

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Emotional Needs of Breast Cancer Patients

- Psycho-social issues vary
- Resources limited
- Often depend on family/relatives
- Care taker burn out

Image Source: Salus

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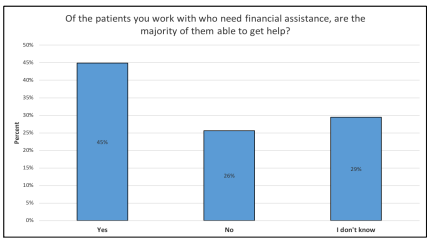
Navigator Perceptions of Financial Burden



Spencer, J.C., Samuel, C.A., Rosenstein, D.L., Reeder-Hayes, K.E., Manning, M.L., Sellers, J.B. and Wheeler, S.B., 2017. Oncology navigators' perceptions of cancer-related financial burden and financial assistance resources. *Supportive Care in Cancer*, pp.1-7.

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Nursing Care for Breast Cancer Patients

- Body
- Mind
- Spirit
- Extends to caregiver and family
- Includes social issues
- Often complex but never wrong

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Identifying Disparities and Connecting Resources

- **A case study**

❖ 38 year old single female

❖ 2 elementary age children

❖ Works full time at local grocery store

❖ Takes online classes in business at the local community college

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Case Study continued

❖ Lives with her elderly mother who has early dementia, one brother in Canada

❖ Resides in public housing and relies on public transportation

❖ Diagnosed with Stage III, 5 cm breast mass with skin changes; she will follow the standard of care treatment guidelines

❖ Attends church in her neighborhood

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"As a nurse, we have the opportunity to heal the heart, mind, soul and body of our patients, their families and ourselves. They may forget your name, but they will never forget how you made them feel."

Maya Angelou
Author, poet and civil rights activist

Image Source: Wikimedia

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References

- National Cancer Institute
  www.cancer.gov
- American Cancer Society
  www.cancer.org
- National Breast Cancer Foundation
  www.nationalbreastcancer.org

71

References

- Comparison of recurrence and survival rates after breast-conserving therapy and mastectomy in young women with breast cancer. (n.d.).
- Hoda, S. A., & Restovaka, E. (2016,). Retrieved from Basic Medical Key: https://basicmedicalkey.com/pathologic-examination-of-breast-and-lymph-node-specimens-including-sentinel-lymph-nodes/
- J.Q. Cao, M. M. (2001). Comparison of recurrence and survival rates after breast-conserving therapy and mastectomy in young women with breast cancer. *Clinical Journal of Oncology*, 1688-97.
- Morris E: Is tomosynthesis mammography ready for prime time? Invited Lecture. 2017 Miami Breast Cancer Conference. Presented March 10, 2017.
- Breast conserving therapy (BCT) Maksims Tjurins LU MF 5th year. Mammogram vs. Breast MRI. Advantages, Limitations, Cost, and Accuracy. Pam Stephan. Updated July 03, 2019.
- https://www.inovanewsroom.org/expert-commentary/2018/01/lumpectomy-whos-a-candidate/ Lumpectomy: Who's a Candidate? By Shannon Lehr | January 23, 2018.
- Ashikaga T, Krag DN, Land SR, et al., National Surgical Adjuvant Breast, Bowel Project. Morbidity results from the NSAB B-32 trial comparing sentinel lymph node dissection versus axillary dissection. J Surg Oncol. 2010;102:111–118.
- Leidenius M, Leivonen M, Vironen J, et al. The consequences of long-time arm morbidity in node-negative breast cancer patients with sentinel node biopsy or axillary clearance. *J Surg Oncol*. 2005;92:23–31
- Tummel E, Ochoa D, Korourian S et al. Does Axillary Reverse Mapping Prevent Lymphedema After Lymphadenectomy? Ann Surg. 2017; 265(5):987-992
- Tolu Oyelowo DC, (2007) *Mosby's Guide to Women's Health*

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