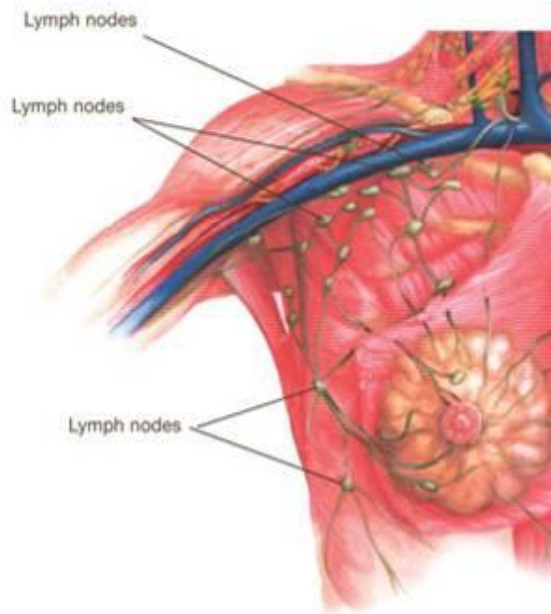


Lymphedema after Breast Cancer

It is a condition in which there is localized collection of the lymphatic fluid and tissue swelling due to compromise in the Lymphatic system.

Lymph vessels drain fluid (called lymph) from tissues throughout the body and allow immune cells to travel where they are needed. Blockage of these vessels is responsible for lymphedema.



Picture taken from - http://www.breastcancer.org/pictures/types/vascular_lymphatic_invasion.jsp

Why you should know about lymphedema?

Women who have been treated for breast cancer may be at risk for arm, breast, and chest swelling. The development of this swelling can be associated with lymphedema. Most women who have had breast cancer will not develop this side effect. The risk of developing lymphedema is highest for women who have surgery and radiation therapy to treat breast cancer.

We will discuss the causes of lymphedema, how to identify the signs and symptoms and how to lower your risk. There is no way to predict as to who will develop lymphedema, however there are things you can do to lower your risk of developing it. Recognizing it early and starting treatment immediately is the best way to prevent complications from lymphedema.

Post-Mastectomy Lymphedema

In Western societies, one of the most common causes of lymphedema is removal of the breast ([mastectomy](#)) and underarm lymph nodes as part of treatment for breast cancer. 10 - 15% of patients, undergoing mastectomy and axillary dissection develop lymphedema because of the obstruction of lymphatic drainage from the arm.

The disruption of the normal drainage pattern as often during surgery to remove the lymph nodes may result in swelling of the arm, breast or chest.

Types of Post Surgical Lymphedema

- Mild :- Occurs within a few days of surgery and resolves in short period of time.
- Acute :- Appears after 4 to 6 weeks post surgery and is usually the more painful
- Chronic (most common) :- Usually appears after 18 to 24 months post surgery and it is painless.

Taken from - <http://www.muschealth.com/gs/CancerCenter.aspx>

Photo of Chronic Lymphedema



Picture taken from the collection of Dr. Sumner A. Slavin, Epocrates Online

Signs and Symptoms of Post-Mastectomy Lymphedema

- Swelling of the affected arm
- Feeling of fullness and tightness of the arm
- Aching pain and discomfort in the affected arm
- Weakness of the affected arm
- Swelling of the hand, often noted when rings no longer fit, without weight gain
- Changes in the way your bra fits

Physical Findings

- The swelling is firm and does not retain an indentation when the skin is compressed by a finger
- The skin in the involved area can become scaly or cracked, or may develop an orange-peel appearance
- Tenderness and soreness can accompany the swelling and skin changes.
- Loss of mobility may also occur.

Diagnosis of Post-Mastectomy Lymphedema

There are no specific tests to diagnose lymphedema, but your doctor will take into account the following to make a diagnosis

- Medical History
- Previous surgical history
- Onset of symptoms
- History of swelling
- Current Medications
- History of other illness like Hypertension, Heart disease or Diabetes Mellitus
- Physical Examination

Your doctor may order the following tests to help diagnose lymphedema

- Cat scan or MRI
- Lymphangiography
- Lymphangiscintigraphy

Complications of Lymphedema

- Infections that develop as a result of the swelling, these can become chronic
- Ulcers
- Increased pain as a result of compression of the nerves
- Deep vein thrombosis
- Depression
- Axillary Web Syndrome
 - Axillary web syndrome is a common of mastectomy and removal of the lymph nodes. Cords and webs develop from lymph vessels that become clotted off and form raised areas under the skin. It is most commonly located in the under arm, but can spread down the arm to the hand or up to the chest.
 - Axillary webbing can persist for years and may predispose patients to develop lymphedema

Photo of Cords Typical of Axillary Webbing



Picture taken from http://www.stepup-speakout.org/Cording_and_Axillary_Web_Syndrome.htm

Photo permission of Elisabeth Josenhans, Physiotherapist
Kunhardtstr 4 20249 Hamburg

Prevention of Post-mastectomy Lymphedema

Prompt recognition is important to prevent complications from lymphedema

Try to avoid infection in the affected arm by

- Inspecting the arm daily
- Taking precautions while cutting nails
- Do not allow blood draws from that arm or placement of vaccinations on the affected arm
- Avoid sharp razors, wear gloves during cooking or gardening, use a thimble when you sew
- Avoid taking your blood pressure on the affected arm
- Keep the area clean with soap and water
- Use a lotion to avoid drying and scaling
- Follow your doctors instructions regarding activity with the arm
- Avoid heavy lifting with that arm
- Elevate your arm above the heart level whenever possible.
- Avoid applying heat to affected area, take care to avoid burning yourself
- Wear loose clothing to avoid constricting the area
- Try to avoid gaining weight

Care of Cuts, Scratches, or Burns

- Wash the area with soap and water.
- Put an over-the-counter antibiotic cream or ointment on the area. Check with your doctor if you are not sure what to use.
- Cover with a clean, dry gauze or bandage. Keep the area clean and covered until it heals. Change the dressing each day when it gets wet.
- For burns, apply a cold pack or cold water for 15 minutes, then wash with soap and water and put on a clean, dry dressing.
- Check every day for early signs of infection: areas with redness, warmth and drainage. Monitor for fevers and chills
- Call your doctor right away if you think you may have an infection.

Treatment of Post-Mastectomy Lymphedema

- Exercise– Light exercises and muscle contractions help to restore flexibility and strength, and improves drainage. A physical therapist may help
- Diet – Eating a well balanced to control your weight
- When possible, raise the arm above the heart level as it facilitates drainage due to gravity
- Use of an arm pump – to increase the fluid flow inside the lymphatics and prevents fluid accumulation
- Good skin care to prevent infection
- Microsurgical Lymph Node Transplant – may be considered in some cases

Treatment with Manual Drainage and Compression

- Manual Drainage is the use of massage techniques to drain the extra fluid out of the tissues
- Compression Bandage - wrapped tightly at the fingers and more loosely up along the arms
- Pneumatic compression bandage to pump the fluid out of the fingers and arms



Picture taken from - <http://www.beyondbasicsphysicaltherapy.com/lymphedema.shtml>

Coping and Support

- The physical and mental consequences of lymphedema can be frustrating
- Talk with your surgeon about prevention of lymphedema and treatments if it develops
- The National Lymphedema Network can provide support

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