Breast Cancer and Lymphedema
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Introduction

What is lymphedema? Why does it happen with a breast cancer diagnosis? Our hope is that this booklet will help you answer these questions.

In the last two decades, many advances have been made in the treatment of breast cancer, and now people survive a lot longer. Lymphedema is a side effect that occurs in about 20% of patients who have received breast cancer treatment. Research has shown that those who are most at risk are those who have had an axillary lymph node dissection, radiation therapy to the operation area, and those who are overweight.

This booklet was developed to help you understand how best to recognize the signs of lymphedema, when to seek help, and how to care for yourself. By having an active role in your own care, you can reduce your risk of getting lymphedema.

The members of your healthcare team – nurses, doctors, physiotherapists, dietitians – are all here to make this part of your journey through life easier and to support you. Please do not hesitate to speak to any one of us if you have questions or concerns.

Your healthcare team.
**Lymphedema**

**Definition**

Lymphedema occurs when there is an accumulation of lymph fluid in a part of the body. People who have lymph nodes removed as part of their breast cancer surgery are at risk of developing this condition. The swelling occurs when a lymph node is removed or blocked preventing lymphatic fluid from draining adequately from the patient’s arm. As the fluid accumulates, the swelling continues. Lymphedema occurs on the side you had your surgery, starting as soon as immediately after surgery, weeks after surgery, within a few months, after a couple of years or even as long as 20 years after treatment. There is no cure for lymphedema but, with proper care of your affected limb it can be avoided and/or controlled.

**Causes**

Lymphedema can either be primary or secondary.

**Primary lymphedema**

Primary lymphedema is an inherited condition caused by problems with the development of the lymphatic system. This is not the kind of lymphedema that breast cancer patients acquire.

**Secondary lymphedema**

Anything that causes injury to the healthy lymphatic system can cause secondary lymphedema. Causes include:

- Surgery
- Infection
- Radiation Treatment
- Injury
- Cancer
Lymph Nodes
- Lymph nodes and their channels are found throughout your body.
- They work with your immune system as a natural defense mechanism.
- Their purpose is to move waste produced when clearing the body of infection and disease.
- They are found around the breast, from the collar bone to the breast bone, beneath the breast, and extending to the axilla (or armpit).
- If there is damage to the lymph drainage system around your breast, the processes above will be impaired.

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Signs and symptoms of Lymphedema
- Swelling of the hands and arms
- Feeling of fullness, puffiness or heaviness in the arm
- Aching in the arm
- Skin feeling tight
- Decreased flexibility or movement in the hand, wrist, arm or shoulder
- Jewelry feeling tight-rings and bracelets
- Clothing tight especially in the sleeves of tops
- Hardening and thickening of the skin on your arm
Reducing your risk
Here are some general guidelines for care in regards to preventing and managing lymphedema.

Basics:
- DO NOT ignore any slight increase of swelling in the hands, fingers, arms or chest wall.
- Rest your arm in an elevated position (above your heart or shoulder).
- Do not wear tight jewelry or elastic bands around affected fingers or arms.
- When traveling by air, patients with lymphedema (or who are at risk), should wear compression bandage or a well fitted compression sleeve. Increase fluid intake while in air.

Maintain good hygiene
- Keep the “at risk” arm spotlessly clean
- Apply moisturizing lotion daily
- Use mild soaps (pH balanced)
- When drying, be gentle but thorough. Make sure it is dry between the creases of the fingers and skin folds.

Protect against injury or infection
- Never allow an injection or blood drawing in the affected arm. (Wear a lymphedema alert bracelet) e.g.: vaccinations, injections, intravenous needles, acupuncture.
- Have blood pressure check on the unaffected arm
- Avoid extreme temperature changes when bathing or washing dishes and it is recommended that saunas and hot tubs be avoided (at least arm out of the hot tub).
- Protect the arm from the sun at all times (wear sun block lotion, at least SPF 15). Avoid tanning beds.
- Try to avoid any type of trauma, eg: bruising, cuts, sunburn or other burns, sports injuries, insect bites, cat scratches to the arm (watch for subsequent signs of infection).
- Wear gloves while doing housework, gardening, or any type of work that could result in even a minor injury.
- When manicuring your nails, keep nails clean and short; do not cut cuticles or hangnails. Inform your manicurist.
- Use an electric razor to remove hair from axilla. Maintain electric razor properly, replacing heads as needed.
- WARNING: if you notice a rash, itching, redness, pain or increase of temperature or fever, see your physician immediately. An inflammation (or infection) in the affected arm could be the beginning or worsening of lymphedema.
Body weight
- Maintain your ideal weight through a well balanced diet.
  - Avoid smoking, caffeine, and alcohol.
- Maintaining a healthy weight can help reduce lymphedema.
- Lymphedema is a high protein edema, but eating too little protein will not reduce the protein element in the lymph fluid; rather, this may weaken the connective tissue and worsen the condition. The diet should contain easily digested protein (e.g. chicken, fish and tofu).
- Follow Canada’s Food Guide for Healthy Eating.

Exercise
- Exercising is important, but consult with your physiotherapist. Do not overtire your arm at risk: if it starts to ache, lie down and elevate it. Recommended exercises: walking, swimming, light aerobics, bike riding, and specially designed ballet or yoga.
- Avoid vigorous repetitive movements against resistance with the affected arm; e.g.: scrubbing, pushing, pulling
- Avoid heavy lifting with the affected arm; never carry heavy hand bags or bags with over the shoulder straps on the affected side.
- Do not lift more than 15 pounds.
- Check with the healthcare professional regarding vigorous, repetitive activities of the upper body such as tennis, rowing, golf or cross-country skiing. To date, research does not suggest that these sports cause lymphedema. Increase the intensity of exercise gradually. Wearing a compression garment during exercise may be recommended.

Compression Garments/Breast Prosthesis
- Patients with large breast should wear light breast prosthesis (heavy prosthesis may put too much pressure on a lymph node above the collar bone). Soft padded shoulder straps may have to be worn. Wear a well fitted bra: not too tight, ideally with no underwire.
- Patients with lymphedema should wear a well fitted compression sleeve during waking hours. At least every 4-6 months, see your therapist for follow-up. If the sleeve is too lose, most likely the arm circumference has reduced or the sleeve is worn.
- Most insurance companies allow for 2 garments to be purchased at a time (one to wear, one to wash); and can be refitted every 6 months to a year.

(Adapted from the National Lymphedema Network Risk Reduction Guidelines and Canadian Cancer Society).
Treatments for lymphedema

The goals of treating lymphedema is to prevent further fluid buildup, to reduce swelling as much as possible, and prevent changes that may become hard to reverse. Please talk to your nurse or physician. We can arrange a physiotherapy consult to help manage the lymphedema. Treatment may include a combination of the following:

**Arm Elevation**
- Keeping your affected hand and arm higher than your heart and shoulder can help increase the flow of lymphatic fluid.

**Mild Exercise**
- Compressive bandages or garments are worn during the treatment
- Exercise therapy allows compression to exert its effect to the fullest and help to drain fluid from the tissue
- Your therapist will design a program of exercise specific for you

**Manual Lymphatic Drainage (MLD)**
- To maintain edema removal achieved in manual lymph drainage
- Manual lymph drainage is a specialized form of gentle massage. It improves drainage from the limb by clearing out the main lymphatic pathways of the body, starting in the main part of the body and moving towards the affected limb.
- Massage therapists who have been specially trained in manual lymphatic drainage deliver this treatment.

**Compression Garments**
- **Bandaging:** This is usually the first therapy used to reduce lymphedema. Multi-layered “short stretch” bandages are used in the reduction phase of treatment. These bandages encourage lymph fluid to flow back out of your affected limb and towards the trunk of your body. Your physiotherapist will teach you how to bandage your arm.
- **Compression Sleeves:** Once you’ve reduced the swelling in your arm through other measures (such as bandaging), we suggest that you wear compression sleeve garment to prevent your limb from swelling in the future. A healthcare worker who has been trained to fit you with your compression sleeve will assist you in obtaining one. This will most likely be a physiotherapist or a nurse.
Pneumatic Compression Pumps

- This device pumps air into a special pump sleeve, creating light pressure to help move lymph fluid into the lymph vessels and back into the bloodstream.
- These are only used if recommended by a doctor of physiotherapist.
- This device should not be used if there is active infection or problems with blood clots.

Pain

- Lymphedema can cause pain and change sensations in the limb.
- In many cases, once the lymphedema is controlled, so is the pain.
- If the lymphedema treatment does not help, your doctor may change the treatment or order medication to relieve pain.
- Some people have numbness and tingling after surgery, which is NOT lymphedema.

Coping Skills

It can be frustrating to know that there is no cure for lymphedema, but we hope that providing you with this information will help you better understand what you may be facing, and provide you with the tools and information to guide you. To recap:

- Find out all you can about lymphedema. The more you know, the better you can communicate with your doctor, nurse and physiotherapist.
- Take care of your affected limb by following the guidelines in this book.
- Take care of your whole body by eating a well balanced diet, exercising and reducing stress.
- Get support from others with lymphedema. We have listed some resources at end of this book. They may be helpful for you to connect with groups and organizations in your community or on-line, who share the experience of living with cancer and lymphedema.
Resources

**Canadian Cancer Society:**
Look in yellow pages for your local office or go to website:
[www.cancer.ca](http://www.cancer.ca)

**Willow Breast Cancer Support Canada:**
Willow offers free support services to all Canadians via their support line. All calls are fielded by trained breast cancer survivors who can give emotional support and answer any of your questions to help you navigate the healthcare system.

Phone: 416-778-5000  
Toll-free: 1-888-778-3100  
Email: info@willow.org  
Website: [www.willow.org](http://www.willow.org)

**Wellspring:**
Telephone: (905) 257-1988  
Toll free: 1-877-499-9904  
email: haltonpeel@wellspring.ca

**Breast Cancer Support Services:**
[www.breastcancersupport.org](http://www.breastcancersupport.org)  
*Men Get Breast Cancer Too:*  

**Sharing Strength:**
A Canadian online resource for women with breast cancer  
[www.sharingstrength.ca](http://www.sharingstrength.ca)

**Cancer Care Ontario:**
[www.cancercare.on.ca](http://www.cancercare.on.ca)

**Lymphovenous Association of Ontario:**
[www.lymphnet.org](http://www.lymphnet.org)

**The Credit Valley Hospital:**
Obtain more information on the Cancer Centre web page  
[www.cvh.on.ca/cancer/index.php](http://www.cvh.on.ca/cancer/index.php)  
The Patient Education Library  
[www.cvh.on.ca/cancer/Education-Library.php](http://www.cvh.on.ca/cancer/Education-Library.php)