

## Breast Cancer Related Lymphedema

**What is lymphedema?** Lymphedema is the buildup of fluid (called lymph) in the tissues just below the skin. This buildup of lymphatic fluid can result in visible swelling or may be experienced as feelings of tightness, heaviness, or discomfort in the swollen area. Unlike other types of swelling related to the body's natural healing processes, lymphedema occurs due to an impaired lymphatic system.

**How is lymphedema related to breast cancer?** Certain cancer treatments can cause damage to the lymphatic system and may result in symptoms of swelling. Cancer surgery, especially when this includes the removal of lymph nodes, as well as radiation therapy, can result in lymphedema.

Following surgery and radiation you may experience mild swelling that often gets better as the body heals. However, if the swelling does not go away and gets worse, this may be lymphedema.

**Am I at risk of developing lymphedema?** It is important to know that not everyone undergoing breast cancer treatment will develop lymphedema. However, some treatments are associated with an increased risk of developing breast-cancer-related lymphedema, or *BCRL*.

BCRL occurs more often for people who have lymph nodes removed from under the arm as part of surgical treatment for breast cancer (**Axillary Lymph Node Dissection**) and who undergo **regional radiation treatment** to the supraclavicular and/or axillary lymph nodes.

Studies have shown other risk factors for developing BCRL include:

- Obesity (BMI of 30 or greater) at time of breast cancer diagnosis
- Skin infections (cellulitis)

**When am I at risk for developing BCRL?** Lymphedema can occur weeks, months, or years after breast cancer treatments. In general, most lymphedema occurs within 3 years of breast cancer surgery or radiation treatment. Research suggests that the type of surgery you have can influence when BCRL develops:<sup>1</sup>

- Axillary Node Biopsy: higher risk for developing lymphedema within 1 year after surgery
- Sentinel Node biopsy: highest risk of developing lymphedema at 3-4 years after surgery

Because onset times vary from patient to patient and are influenced by other factors, it is important to have screenings for breast-cancer-related lymphedema for 5 years.

**What are the signs and symptoms of breast-cancer-related-lymphedema?** Knowing and reporting any signs or symptoms of lymphedema can result in early detection and more effective treatment.

Where does lymphedema develop after breast cancer treatment?	Common signs and symptoms of breast cancer related lymphedema
<ul style="list-style-type: none"> <li>• Breast</li> <li>• Chest</li> <li>• Underarm</li> <li>• Upper back</li> <li>• Arm</li> <li>• Hand</li> </ul> <p>*Lymphedema would develop on the same side of the body that has undergone surgery, lymph node removal and/or radiation treatment.</p>	<ul style="list-style-type: none"> <li>• Visible swelling</li> <li>• Sensation of aching, fullness, heaviness, or discomfort in the arm, hand, breast, chest, and upper back.</li> <li>• Skin feeling tight, looking pink, or feeling warm to the touch</li> <li>• Clothing, bra, or jewelry fitting tight and/or leave visible marks even though you haven't gained weight</li> <li>• Trouble fitting your arm into a jacket or sleeve</li> </ul>

<sup>1</sup> McDuff SGR, Mina AI, Brunelle CL, Salama L, Warren LEG, Abouegylah M, Swaroop M, Skolny MN, Asdourian M, Gillespie T, Daniell K, Sayegh HE, Naoum GE, Zheng H, Taghian AG. Timing of Lymphedema After Treatment for Breast Cancer: When Are Patients Most At Risk? *Int J Radiat Oncol Biol Phys*. 2019 Jan 1;103(1):62-70. doi: 10.1016/j.ijrobp.2018.08.036. Epub 2018 Aug 28. PMID: 30165125; PMCID: PMC6524147.

## Breast Cancer Related Lymphedema

You know your body best. Be aware and report any signs of lymphedema to your healthcare team right away.



**How is lymphedema diagnosed?** Lymphedema is diagnosed based on symptoms of swelling that you report and by clinical signs of swelling observed and measured by your healthcare provider.

At Southcoast Oncology Rehabilitation Services we also use Bioimpedance Spectroscopy (BIS) which detects the accumulation of fluid in the body region that is at risk for developing lymphedema. BIS is a safe and painless way to detect swelling early on in recovery, even before any physical signs or symptoms develop.

**Is there treatment for lymphedema?** Yes. Southcoast Oncology Rehabilitation Department offers lymphedema treatment provided by one of our Physical Therapists with specialized training as Certified Lymphedema Therapists.

Your therapist will work with you to generate an individualized plan to reduce any symptoms and appearance of swelling and will teach you how to maintain improvement in swelling symptoms.

Typical treatment sessions may include:

- Manual Lymphatic Drainage: A specialized manual technique that works to mobilize lymph fluid out of the swollen body part/region
- Application of compression to the swollen limb: This may include wrapping the limb with compression bandages or recommending daily use of compression sleeve.
- Exercise: Perform and prescribe safe and effective exercises to improve circulation of lymph fluid
- Patient Education: Lymphedema risk reduction practices and lymphedema management strategies for short- and long-term lymphedema management.

Our physical therapists are experts in developing individualized treatment plans to:

- Restore your range of motion and strength following breast cancer surgery and/or radiation treatments
- Provide comprehensive physical rehabilitation necessary to return to your preferred physical activities.

With early detection and treatment, lymphedema can be reversed. Report any symptoms to your healthcare provider and discuss a referral to our lymphedema program and breast cancer rehab program.

### References and Further Reading

American Cancer Society, "Lymphedema"

<https://www.cancer.org/cancer/managing-cancer/side-effects/swelling/lymphedema.html>

BreastCancer.org, "Lymphedema: Symptoms, Treatment, and Risk Factors"

<https://www.breastcancer.org/treatment/side-effects/lymphedema>

Mass General Brigham Cancer Center, "Learn About Breast Cancer Lymphedema"

<https://www.massgeneral.org/cancer-center/treatments-and-services/breast-cancer/lymphedema/about>

National Lymphedema Network, "Risk Reduction Practices"

<https://lymphnet.org/risk-reduction-practices>

<sup>1</sup> McDuff SGR, Mina AI, Brunelle CL, Salama L, Warren LEG, Abouegylah M, Swaroop M, Skolny MN, Asdourian M, Gillespie T, Daniell K, Sayegh HE, Naoum GE, Zheng H, Taghian AG. Timing of Lymphedema After Treatment for Breast Cancer: When Are Patients Most At Risk? *Int J Radiat Oncol Biol Phys*. 2019 Jan 1;103(1):62-70. doi: 10.1016/j.ijrobp.2018.08.036. Epub 2018 Aug 28. PMID: 30165125; PMCID: PMC6524147.