

Lymphedema Pathway

1. Assessing Lymphedema

Lymphedema may present differently depending on which stage of lymphedema

Ensure other conditions with similar symptoms are ruled out, such as:

DVT
or
Cancer Recurrence

Check for complications/red flags:

Lymphorrhea
Cellulitis

2. ISL Staging for Lymphedema:

Stage 0: Reduced lymph transport. Sub clinical condition, swelling not evident.

Stage I: Early accumulation of fluid, increased tissue protein level. Edema reduces with elevation, pitting may occur.

Stage II: limb elevation rarely reduces swelling. Pitting edema is evident.

Stage II (late): tissue fibrosis evident. Non-pitting edema.

Stage III: Lymphostatic elephantitis. Non-pitting edema. Tropic skin changes.

Subcategories:

Minimal: <20% increase in limb volume

Moderate: 20-40% increase in limb volume

Severe: >40% increase in limb volume

3. Steps to Take in Primary Care:

Once other possible causes of edema are ruled out, compression may be recommended and the patient should be educated about the importance of skin care.

Print Patient Self Management Resources for resources the patients can use to help understand lymphedema and manage symptoms better.

Referral to Certified Lymphedema Therapist or AHS CCA Rehabilitation Oncology.

Overview of cancer-related secondary lymphedema

General Overview:

- Lymphedema is a collection of fluid that causes edema in the arms and legs (1).
- Lymph nodes normally filter fluid as it flows through them. If the lymph system isn't working as it should, fluid can build up in the affected area, and lymphedema can occur (1).
- One of the leading causes of secondary lymphedema is cancer treatment (2).
- Lymphedema can range in presentation, from mild and transient to severe and persistent swelling (2).

Table 1 – Common Cancers and Treatments Associated with Lymphedema

Common Cancers Associated with Lymphedema	Treatments Associated with Lymphedema	Timeline of Lymphedema Symptom Onset
<ul style="list-style-type: none"> ➤ Breast ➤ Genitourinary (bladder, prostate) ➤ Gynecological (endometrial, cervical, ovarian, uterine, vulvar) ➤ Head and neck ➤ Lymphoma ➤ Melanoma ➤ Sarcoma 	<ul style="list-style-type: none"> ➤ Surgery ➤ Radiation ➤ Chemotherapy 	<ul style="list-style-type: none"> ➤ Days to decades after treatment

Assessment:

- When assessing for lymphedema, other conditions with similar symptoms should first be ruled out, such as deep vein thrombosis (DVT), infection/cellulitis or recurrence of cancer.
- Lymphedema may present differently depending on which stage of lymphedema the patient has. AHS Rehabilitation Oncology uses the International Society of Lymphology Staging and Subcategory criteria. More information about the stages is listed below (3):

ISL Staging:

- Stage 0: Reduced lymph transport. Sub clinical condition, swelling not evident.
- Stage I: Early accumulation of fluid, increased tissue protein level. Edema reduces with elevation, pitting may occur.
- Stage II: limb elevation rarely reduces swelling. Pitting edema is evident.
- Stage II (late): tissue fibrosis evident. Non-pitting edema.
- Stage III: Lymphophostatic elephantitis. Non-pitting edema. Trophic skin changes.

Subcategories:

- Minimal: <20% increase in limb volume
- Moderate: 20-40% increase in limb volume
- Severe: >40% increase in limb volume

Complications/Red Flags:

Lymphorrhea:

- This condition occurs when lymph fluid leaks from the skin. Also known as weeping lymphedema.
- Lymphorrhea is also a sign of a serious infection or recurrence. Conduct assessments to rule out recurrence and treat for infection if one is found.
- Urgent medical management is typically required, such as to treat electrolyte imbalances and albumin levels.
- An urgent referral can also be made to Rehabilitation Oncology for supportive care.

Cellulitis:

- People with lymphedema are at higher risk for cellulitis, and it is important to treat quickly.
- If the cellulitis is recent (within 4 weeks), the referral to Rehabilitation Oncology is eligible to be marked as urgent.
- Ensure treatment has started for cellulitis (i.e., antibiotics).

Steps to Take in Primary Care

- [Assess](#) the patient to rule out any other conditions, such as DVT or recurrence.
- Refer the patient to AHS Rehabilitation Oncology (see [Referral](#) section below for different pathways and eligibility requirements for urgent vs. routine referrals).
- Communicate the importance of skin care and self-management steps the patient can take (see [Patient Self-Management Resources](#)) while waiting for their appointment with a Certified Lymphedema Therapist.
- If other possible causes of the swelling have been ruled out, you may recommend compression or the resources below. Referral to OT can also be made if you are not able to provide education about compression.

Additional Resources

Note – a national follow-up guideline for breast cancer-related lymphedema will be released in Spring 2023.

Alberta	Canada	North America	International
Alberta Aids to Daily Living (AADL) Program	Canadian Lymphedema Framework	National Cancer Institute Lymphedema PDQ	International Lymphoedema Framework (ILF)
Alberta Lymphedema Association	Canadian Lymphedema Framework Physician Reference Card (note: this is not specific to cancer-related lymphedema)	National Lymphedema Network	ILF Best Practice Document
AHS Rehabilitation Oncology			
AHS Supportive Care		National Lymphedema Network Position Paper on Diagnosis	
ConnectMD (Edmonton and area)			
Specialist Link (Calgary and area)			

Referral to CCA Rehabilitation Oncology or Certified Lymphedema Therapist

Referral to CCA Rehabilitation Oncology

If the patient has not yet been discharged from CCA

- The patient can contact their Cancer Care team for a referral. The team will be able to refer the patient via the patient's EMR.

If the patient has had a previous appointment with Rehabilitation Oncology

- The patient can simply call the Rehabilitation Oncology clinic to book an appointment if they have already had an appointment (for any reason) within the last 2 years.

If the patient has been discharged from CCA

- To refer to a Rehabilitation Oncology clinic, search 'lymphedema' in:
 - [Alberta Referral Directory](#) website for Rehabilitation Oncology clinics.
- If a patient cannot access the closest Rehabilitation Oncology clinic, you can refer them to an AHS Community Rehabilitation Clinic. Search 'lymphedema' in:
 - <https://www.albertahealthservices.ca/info/Page15329.aspx>
 - Please note, not all sites listed may offer cancer-related lymphedema services.
- State that it is for **cancer-related lymphedema** on the referral.

General Eligibility Requirements for AHS Rehabilitation Oncology Referrals

- Aged 17 years old and over
- Client requires specialty outpatient oncology rehabilitation for a diagnosis, impairment and/ or functional limitation related to their cancer or cancer treatment

Exclusion Criteria

- Secondary lymphedema not related to cancer or cancer treatment
- Primary lymphedema

Referral to Community-Based Certified Lymphedema Therapist

If the patient cannot attend an appointment in Cancer Care Rehabilitation Oncology (table above), a list of Certified Lymphedema Therapists can be found on the Alberta Lymphedema Association website:

[Therapists - Alberta Lymphedema Association](#)

Please note that the certified lymphedema therapists listed in this resource may not be associated with Alberta Health Services (AHS), and as they are out of the AHS system the patient may have to pay for services.

*Alberta Aids to Daily Living (AADL) program can help cover part of the cost of compression garments for those experiencing chronic lymphedema.

References:

1. Lymphedema [Internet]. [cited 2022 Mar 30]. Available from: <https://myhealth.alberta.ca:443/Health/Pages/conditions.aspx?hwid=tj4740spec&lang=en-ca>
2. Cancer Care Alberta AHS. After Treatment: Information and Resources to Help You Set Priorities and Take Action [Internet]. 2022. 56 p. Available from: <https://www.albertahealthservices.ca/assets/info/cca/if-cca-after-treatment-for-cancer.pdf>
3. International Society of Lymphology. The diagnosis and treatment of peripheral lymphedema. Consensus document of the International Society of Lymphology. Lymphology. 2003 Jun;36(2):84–91.

© 2023, Alberta Health Services, Cancer Care Alberta



This work is licensed under a [Creative Commons Attribution-Non-commercial-Share Alike 4.0 International license](https://creativecommons.org/licenses/by-nc-sa/4.0/). To view a copy of this licence, see <https://creativecommons.org/licenses/by-nc-sa/4.0/>. You are free to copy, distribute and adapt the work for non-commercial purposes, as long as you attribute the work to Alberta Health Services and abide by the other licence terms. If you alter, transform, or build upon this work, you may distribute the resulting work only under the same, similar, or compatible licence. The licence does not apply to AHS trademarks, logos or content for which Alberta Health Services is not the copyright owner.

DISCLAIMER: The evidence-based information and recommendations provided in this pathway and resource are intended to assist Primary Care Providers with supporting patients who may be experiencing cancer-related lymphedema. These recommendations are not intended to be a substitute for clinical judgment.

Patient Self-Management Resource Lymphedema

Lymphedema is a collection of fluid that causes swelling in the arms and/or legs. One of the leading causes of lymphedema is cancer treatment. Lymph nodes usually filter fluid as it flows through them, but if the lymph system isn't working as it should, fluid builds up and lymphedema can occur. Below you will find resources that are designed to help patients with self-management of lymphedema. You may access the resources at the web-links provided, or by using your camera to capture the accompanying QR codes.

Please Note: bit.ly links are case sensitive



After Treatment Book — <https://bit.ly/CCAatb>

A comprehensive 48-page PDF resource for patients who are finishing treatment. The booklet covers common concerns and includes information to help patients set priorities and take action.

CCA After Treatment Class — <https://bit.ly/CCAClasses>

Search “after treatment”. Online class for patients who have completed their cancer treatment. Participants receive a workbook and pick one priority to take action on.

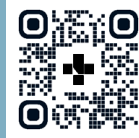


CCA Lymphedema E-Learning Module — <https://bit.ly/ccaELM>

CCA e-learning module that covers topics such as defining lymphedema, its causes, symptoms, reducing risk, treatment and common questions and concerns.

MyHealth AB Managing Lymphedema — <https://bit.ly/mhaML>

Webpage with information about how to recognize the signs of lymphedema and how to manage the condition.



Alberta Lymphedema Association — <https://bit.ly/ABLyA>

Webpage with general information about lymphedema, including treatment options.

Canadian Cancer Society Lymphedema Info — <https://bit.ly/CCSLE>

Webpage with comprehensive information on lymphedema, including how to prevent and manage the condition.



This resource can be found on pages 10-11 of the **Cancer Care Alberta After Treatment Book (2022)**. You can find the most updated version of the After Treatment Book at <https://www.albertahealthservices.ca/assets/info/cca/if-cca-after-treatment-for-cancer.pdf> or by scanning the QR code.



Lymphedema

What is lymphedema?

Lymphedema is a medical condition that needs to be diagnosed by your doctor. It is excessive swelling of a body part due to the buildup of lymph fluid. This buildup can happen when the lymphatic system or nodes are:

- Inflamed
- Damaged from radiation
- Removed during surgery
- Blocked

Lymphedema can range from mild swelling that comes and goes, to a significant persistent swelling. It is often a lifelong condition where you need to do long-term self-management.

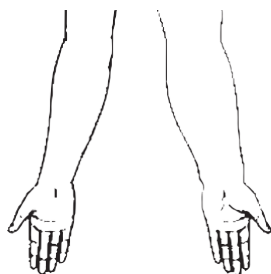
Physiotherapy or occupational therapy can help. Ask your healthcare provider for a referral to Rehabilitation Oncology (see [page 15](#) of the After Treatment Book).



What are the signs and symptoms of lymphedema?

- Swelling in the affected area
- A feeling of heaviness, tingling or numbness in the affected area
- Clothing or jewellery becomes tight on that limb
- Find it more difficult to move the affected limb
- Have pain or discomfort in the affected area
- Have infections that reoccur

Have your doctor assess any changes in size, colour, temperature, skin condition, and sensation, and get a referral to a certified lymphedema therapist for treatment. Check with your local cancer centre to see if they have a certified lymphedema therapist.



Infections (cellulitis)

Infections can be an urgent medical situation. Signs may include redness, warmth, pain, chills/fever and a feeling of overall illness or flu-like symptoms. See your family doctor if you notice any of these signs or symptoms.

How can I reduce my risk of developing lymphedema?

We do not know why some people with the same risk factors develop lymphedema and others do not. Here are some things you can try to prevent lymphedema:



- Minimize injury to the affected limb.
- Maintain good skin and nail care – to help reduce the risk of developing infection.
- Clean small breaks or cuts in the skin with soap and water and apply antibiotic cream. Have your family doctor look at any serious cuts.
- If possible, use your non-surgical arm for any injections, IVs, automated blood pressure readings or blood draws.
- Do not wear tight-fitting jewellery or clothing on the affected limb.

Some considerations for your activity level and lifestyle:

- Keep active. Talk to your family doctor before you start any exercise program.
- Stay at a healthy body weight with a well-balanced diet and exercise.
- Swimming, walking, biking, and light yoga are all good activities. Avoid temperature extremes (for example, **hot yoga is not recommended**).
- Gradually build up the length of time and intensity of your exercise.
- Take frequent rest periods during activity.

Learn about lymphedema in the **Understanding Cancer-Related Lymphedema** module at www.ahs.ca/cancersupportivecare > [Rehabilitation Oncology](#) > Lymphedema/Swelling or scan the QR code.

