

## Clinical Practice Guidelines - Breast Disease Site

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<b>Guideline Title:</b>	The Risk Reduction and Management of Secondary Lymphedema	<b>Date: (O):</b>	Sept 26, 2011
		<b>(R):</b>	
<b>Tumor Group:</b>	Breast Disease Site Group	<b>Page:</b>	1 of 17
<b>Issuing Authority:</b>	Dr. Kara Laing Clinical Chief, Cancer Care Program	<b>Date Signed:</b>	May 23, 2012
<b>Adapted From:</b>	The Northern Ireland, Clinical Resource Efficiency Support Team's "guidelines for the diagnosis, assessment and management of lymphoedema", February 2008 (63).		

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### Introduction:

Lymphedema is the abnormal collection of protein-rich fluid in the interstitial spaces due to a defect in the lymphatic drainage network (1,2). It usually affects the extremities resulting in edema to the affected limb which predisposes the patient to infection, cellulitis and lymphangitis. There are two types - **primary lymphedema** which are abnormalities in the lymphatic system that are present at birth, although not always clinically evident until later in life; and **secondary lymphedema** which is due to an acquired dysfunction of otherwise normal lymphatics.

Secondary lymphedema has a number of causes, which include infection, trauma, congestive heart failure, portal hypertension, obesity and malignancy. It also often occurs after therapeutic interventions such as surgery and treatment for cancer, which will be the focus of this lymphedema guideline. Lymphedema is most commonly associated with edema of the arm when patients have undergone surgery or radiation treatment for breast cancer. It can present in the lower extremities as well, following treatment for pelvic or gynaecologic cancer that involve the inguinal or pelvic lymph nodes. Lymphedema can also affect the head and neck, genitalia, or the trunk, and has been known to develop immediately after surgery or weeks, months, and even years later.

Chronic lymph stasis is characterized by a thickening in the basement membrane of lymphatic vessels and an increase in collagen disposition with adipose and connective tissue overgrowth. This leads to progressive subcutaneous fibrosis and prevents passage and filtration of lymph fluid. When compensatory mechanisms become inadequate to meet the requirements of lymphatic flow, lymphedema occurs (1).

Lymphedema is a progressive, deforming condition that is both physically and psychologically debilitating. Changes in physical appearance and functioning of the limb can also lead to physical, psychological, social, spiritual, and emotional quality of life issues. For example, body

image problems, decreased range of motion, sleep disturbances, inability to complete family and occupational responsibilities, pain, and depression can occur as a result of lymphedema (2).

**Staging**

In the absence of a staging standard, the Eastern Health Lymphedema Working Group have decided to accept the staging system of the International Society of Lymphology (3,4,66). It allows an evaluation of the severity of the edema, from stage 0 (preventative stage) to stage 3, according to body site (see Table 1 below).

**Table 1: Staging of Lymphedema**

Stage	Limb Lymphedema	Head and Neck Lymphedema	Trunk and Genitalia Lymphedema
Stage 0 A latent or subclinical condition	- No swelling/pitting - Feeling of heaviness in limb (may be present months or years before visible symptoms appear)	- Swelling is local - Regular functioning not affected	- Swelling is present - Bony areas not easily seen beneath swollen tissue - May be pitting present
Stage 1 Early accumulation of protein rich fluid	- Pitting occurs with pressure - Edema reduces with elevation	- Swelling is local - Affects regular functioning	- Bony areas very difficult to identify - Natural skin folds aren't apparent - Swelling changes shape of affected body area
Stage 2 Development of tissue fibrosis	- Increased fibrous tissue - No pitting - Prone to infections - No reduction in swelling with elevation	- General swelling of face and/or neck - Interferes with regular functioning (ie. difficulty turning head, or opening and closing mouth)	- Skin weeping lymph fluid - Swelling interferes with regular functioning - Swelling drastically changes the shape of affected body area
Stage 3 Lymphostatic elephantiasis	- Increasing fibrosclerosis - Increasing edema - Skin becomes thick with hanging folds - Lymph may leak through damaged skin	- Swelling is severe - May have be accompanied by skin ulcers or brain swelling - Ability to eat is severely affected	- Lymphedema is disabling and dramatically interferes with functioning

**Available Service**

Since 2005, the Dr. H. Bliss Murphy Cancer Centre has employed a full time lymphedema nurse coordinator, who has completed specialized training in the care and management of cancer-related lymphedema. The service is available upon request from health professionals, but self-referrals from patients are also accepted. The referral form has been included in this guideline and available on-line at [www.easternhealth.ca](http://www.easternhealth.ca) .

**NOTE:** The coordinator or lymphedema therapist will require the patient to have undergone a clinical examination by the family physician, surgeon or oncologist prior to commencement of treatment.

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The diagnosis of lymphedema by the physician or surgeon will often be made on the basis of the medical history and physical examination of the patient. Imaging is rarely used to diagnose lymphedema in this province but frequently used to rule out other physiological causes (1). Various methods of limb volume measurement have been used to determine if a volume increase is present in the affected limb, such as water displacement, perometry (a infra-red light device used to assess the size and composition of a lymphedematous limb), as well as limb circumference measurement. Consistent evidence suggests that the latter is a reliable method, with a finding of a 2 cm or more difference in limb circumference, between that of the affected and unaffected one, is indicative of lymphedema (5-7).

The symptoms that patients frequently complain of include swelling or a tight feeling in the affected limb which may be experienced with clothing, jewellery, or sudden feeling of tightness in shoes. Decreased flexibility, weakness, soreness, heaviness, pain, or signs of infection in the affected limb are also common (66). When fibrosis of the cutaneous and subcutaneous layers occurs, the skin takes on the appearance of orange-peel (peau d'orange). Gynaecological lymphedema may be difficult to recognize. Its symptoms may include genital swelling, labial thickening, and changes in pubic hair growth and skin texture.

### Questions:

1. What are the current treatment strategies for the management of lymphedema?
2. What risk reduction strategies should be promoted to limit the severity of lymphedema?

### Target Population:

These recommendations are aimed toward patients whom are at risk for or whom have been diagnosed with secondary lymphedema.

### Supporting Evidence:

The best practice management of lymphedema is one that has a holistic, multidisciplinary approach, where appropriate referrals to other members of the multidisciplinary team (physiotherapists, occupational therapists, nurses, oncologists, surgeons, family physicians, psychologists) are provided as necessary. Lymphedema management also requires a comprehensive approach that includes assessment, therapy, early detection, and education of risk reduction strategies. Successful management of lymphedema relies on patients and caregivers playing an active role.

The goals of lymphedema management would include:

- to restore maximum functional independence;
- to reduce risk of infection;
- to provide long-term control of limb volume;
- to improve limb shape;
- to maximize lymph drainage in affected areas and minimize fibrosis;
- to restore maximum musculoskeletal function and correct postural imbalance;
- to provide psychological support;

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- to educate patients in understanding the causation of their own condition and rationale for treatment;
- and to promote self-management.

### **Assessment**

Upon referral, the lymphedema therapist will complete a thorough lymphedema assessment during the first visit. The findings of the initial assessment will be recorded and will form the baseline from which management is planned and monitored. Factors the lymphedema therapist will consider during her first assessment would include:

- *Medical referral* – medical assessment used to diagnose lymphedema, such as patient's history and physical findings and any screening investigations results;
- *Tissue swelling* – described as mild, moderate or severe, pitting or nonpitting. Circumferential limb measurement using a flexible non elastic measuring tape at various anatomical landmarks or at given distances from the fingertips or toes (4,8). There is no effective method for measuring edema affecting the head and neck, breast, trunk or genitalia. Digital photography is recommended as an appropriate means to subjectively record and monitor facial and genital lymphedema;
- *Skin condition* – thickened, warty, bumpy, blistered, lymphorrhoeic, broken or ulcerated;
- *Vascular status* – can be assessed and investigated, if necessary, by the physician prior to referral. The therapist will ensure the presence of brachial/pedal pulses in the upper and lower extremities prior to commencing therapy;
- *Pain* – requires noting the cause, nature, frequency, timing, site, severity and impact. The therapist will enlist the help of the patient's family physician or the palliative care team for management of pain, as needed;
- *Nutritional status* – the role of diet is not yet established in lymphedema. However, obesity is a risk factor for the development of lymphedema after treatment for breast cancer (9-14). The findings of one recent study suggest that breast cancer survivors whose BMI $\geq$ 30.0 at the time of the breast cancer surgery were found to be approximately 3.6 times more likely to develop lymphedema at 6 months or greater after diagnosis than breast cancer survivors whose BMI was  $\leq$ 30.0 at the time of cancer surgery (15). Patients at risk for lymphedema should be encouraged to maintain a healthy body weight. A recent Canadian meta-analysis of lymphedema studies revealed the results of an high quality study which indicated that women who participated in a 12-week dietary intervention and loss an average of 3.3 kg of body weight had a significant reduction in upper extremity lymphedema volume (16);
- *Psychosocial* – lymphedema can result in functional impairment, reduced self-esteem, distorted body image, depression, anxiety, and problems with sexual, family and social relationships (17-19). The lymphedema therapist will assess and provide psychosocial support as required as part of her continuing plan of care. She will also identify those who require additional counselling and initiate referral to the social work department as needed;
- *Mobility and function* – patients with functional, joint or mobility problems should be referred as appropriate for physiotherapy and/or occupational therapy assessment (19-21).

Each individual’s management program will be determined by the site, stage, severity and complexity of the lymphedema, and taking into account the psychosocial needs of the patient as well.

***Management***

The current “gold standard” of managing lymphedema is called **complete** or **complex decongestive therapy (CDT)** which includes manual lymphatic drainage (MLD), various forms of compression, skin care and exercise (22,64). Though, literature is limited, there does appear to be consensus among the available clinical trials, that combination CDT is more effective than the individual components alone (23-32). In fact, when patients were compliant and had regular follow-up, CDT has been found to be effective in:

- increased quality of life
- decreased limb volume
- decreased pain
- decreased lymph capillary pressure
- and decreased infection rate.

CDT may need to be modified in the presence of complex co-morbidities (ie. advanced localized cancer) or due to patient choice. CDT has been divided into 2 phases, the **intensive** and the **maintenance phases**.

In the *intensive* phase of treatment, the goal is the initial reduction of the lymphedema volume of the affected area. It may require daily treatments (5 days per week) with a therapist for 2-6 weeks. Once maximum volume reduction of the area is achieved, the patient is transitioned to a long-term *maintenance* phase. This phase of treatment encourages the transfer of care from the professional to patient/caregivers and continues for the rest of the patient’s life. It may include regular follow-ups or further intensive treatment when necessary. Initially six month follow up reviews are the norm, with telephone follow-ups for those considered stable.

**Table 2 : The Two Phases of Complex Decongestive Therapy (62)**

Phase 1 - Acute	Phase 2 - Maintenance
<ul style="list-style-type: none"> <li>• Manuel lymphatic drainage (MLD)</li> <li>• Compression bandaging</li> <li>• Skin care</li> <li>• Remedial exercises</li> <li>• Self care</li> </ul>	<ul style="list-style-type: none"> <li>• Compression garments</li> <li>• Skin care</li> <li>• Regular exercise</li> <li>• MLD (as appropriate)</li> <li>• Night time compression</li> </ul>

The components that comprise the Complex Decongestive Therapy are:

- *Manual lymphatic drainage* (22,33-35), or MLD, is based on the knowledge of the normal lymphatic anatomy and physiology, and incorporates the use of specific massage techniques which mobilizes the skin without friction and stimulates the lymphatic system. A recent meta-

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analysis concluded that the evidence demonstrated a statistically significant benefit from the addition of MLD for reducing upper extremity lymphedema volume (16);

- *Compression bandaging* (16,22,27,36,37) uses specific short-stretch bandages which exhibit low resting pressures and high working pressures, to provide support for underlying tissues and to act as a counterforce to voluntary muscle activity, hence to prevent re-accumulation of fluid.. It can also reduce areas of fibrosis and reshape the limb. This layered approach to bandaging includes the use of a skin protection or non-compression layer, a padding layer of foam, and short stretch compression bandages;
- *Exercise* (38-41) is used in conjunction with compression bandages in the intensive phase, to enhance the efficiency of the muscle pump, hence increasing lymph circulation. Remedial exercises are a standard component of Phase I and Phase II CDT. Once believed to increase the risk of lymphedema, supervised or directed exercise (with the use of compression garments) has since been proven to provide a clinically meaningful improvement in shoulder ROM in women with breast cancer, and in turn actually helps to lower the lymphedema risk. It also has been shown to decrease other physical and psychological problems experienced by survivors, such as fatigue, depression, anxiety, and social isolation (16,42). The more commonly used beneficial types of exercises would include remedial exercises, flexibility/stretching exercise, resistance training (43), and aerobic conditioning. Any exercise program should be started gradually in these patients and increased cautiously. Performing exercise beyond an individual's duration or intensity may trigger or worsen lymphedema temporarily. The therapist will refer the patient to a physiotherapist when the patient's range of motion is found to be impaired;
- Meticulous *skin care* (62,64,66) is stressed to all patients in both phases of treatment. The general principles of skin care (see Box 1 below) aim to preserve the skin barrier function. Maintenance of skin integrity and careful management of skin problems in patients with lymphedema are important to minimize the risk of infection;

### Box 1: General principles of skin care\*

- *Wash daily, whenever possible, using pH neutral soap, natural soap or a soap substitute, and pat dry thoroughly*
- *Ensure skin folds, if present, are clean and dry*
- *Monitor affected and unaffected skin for cuts, abrasions or insect bites, paying particular attention to any areas affected by sensory neuropathy*
- *Apply emollients as suggested by the Canadian Dermatology Association, such as Curel\* or Lubriderm\**
- *Avoid scented products*

\*Adapted from: Lymphedema Framework, International Consensus on Best Practice Management of Lymphedema, 2006 (62).

- *Compression garments* (22,33,44,45) are used in the maintenance phase to provide compression, after the maximum volume reduction has been achieved in the intensive phase. These graded compression garments that deliver pressures of 20 to 60 mm Hg are the mainstay of treatment and can also be used as primary therapy. Patients need to be measured and fitted appropriately by a 'certified fitter' to ensure safety and compliance, and replaced every

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3-6 months (or when they begin to lose their elasticity). A recent meta-analysis indicated that these studies provide level II evidence for a benefit for the use of a compression garment for both upper and lower extremity lymphedema (16);

- *Intermittent pneumatic compression* (16,28), or IPC consists of an electrical air compression pump connected to an inflatable garment that can be used on an upper or lower limb. It is thought to reduce edema by decreasing capillary filtration, and therefore lymph formation, rather than by accelerating lymph return. These devices are readily available and many patients find they are convenient to use. However, a recent meta-analysis indicates that there is limited evidence to support the use of these pumps. Clinical experience indicates that with extended use, more and more time is required to achieve the initial result. It is rarely used in practice at our center and only in combination with other therapies, deemed appropriate by an appropriately trained professional.

### ***Miscellaneous Therapies***

Other therapies have been researched to determine their usefulness in the treatment of lymphedema, such as low-level laser (LLL) therapy and the use of hyperbaric oxygen therapy. A recent meta-analysis revealed that only one of the four LLL studies reviewed found significant benefit from LLL therapy, which was of poor quality. While the one high quality study that was reviewed found no significant differences in comparing the LLL group and the sham LLL group (16). Recently a phase II randomized clinical trial was carried out comparing a hyperbaric oxygen (HBO) regimen to standard treatment of breast cancer-related lymphedema, and no evidence was found to indicate a beneficial effect of HBO (46,47). To date there is not enough evidence to support the use of either in the treatment of lymphedema.

There has been some success in reducing post-surgical morbidity results by the introduction of sentinel node biopsy (SNB) versus axillary lymph node dissection (ALND) in the surgical treatment of breast cancer (48-50). However, not all women are candidates for SNB, and at least 35% of women who initially undergo SNB return later for ALND following the detection of a positive sentinel node (51).

Two main classes of drugs have been used in the treatment of lymphedema, benzopyrones and diuretics. A Cochrane review of benzopyrones was completed and revealed no conclusive evidence of their effectiveness in secondary lymphedema treatment (52). The steering committee for Health Canada's Canadian Breast Cancer Initiative warned against the use of diuretics for lymphedema, due to the possible adverse effects of hypotension, dehydration and electrolyte imbalance (59). Therefore, benzopyrones or diuretics are **not** recommended for use in the treatment of lymphedema.

### ***Risk Reduction Strategies***

The primary focus for risk reduction of secondary lymphedema would be patient education. This is important in promoting early recognition and treatment of symptoms to limit the severity of the condition. Ideally, the opportune time to introduce lymphedema education for the patient would be pre-operatively, or immediately post-operatively. However, patients often will receive information about the condition only once they have actually developed symptoms.

The basis of the most common risk reducing strategies would include trying to prevent interference with lymph transport and keeping the production of lymph to a minimum. Since the production of lymph is directly related to amount of blood flow, any stimulus which increases the rate of blood flow, such as heat and/or vigorous exercise, can potentially lead to increased lymph production. This increased volume of lymph in an impaired lymph drainage system creates the potential for lymphedema. However, the evidence to support or refute these strategies is minimal, and often what is available has been based on studies utilizing breast cancer patients only. Therefore, when available evidence is limited, the knowledge of pathophysiology and clinical experience of experts in the field will provide guidance.

The National Lymphedema Network provided a position statement on 'Lymphedema Risk Reduction Practices' in 2010 (53). The Eastern Health Lymphedema working group endorse these practices.

### 1. *Skin Care – Avoid trauma/injury to reduce infection risk*

- Keep extremity clean and dry
- Apply moisturizer daily to prevent chapping/chafing of skin
- Attention to nail care; do not cut cuticles
- Protect exposed skin with sunscreen and insect repellent
- Use care with razors to avoid nicks and skin irritation
- If possible, avoid punctures such as injections and blood draws
- Wear gloves while doing activities that may cause skin injury (i.e., washing dishes, gardening, working with tools, using chemicals such as detergent)
- If scratches/punctures to skin occur, wash with soap and water, apply antibiotics, and observe for signs of infection (i.e., redness)
- If a rash, itching, redness, pain, increased skin temperature, fever or flu-like symptoms occur, contact your physician immediately for early treatment of possible infection.

### 2. *Activity/Lifestyle*

- Gradually build up the duration and intensity of any activity or exercise
- Take frequent rest periods during activity to allow for limb recovery
- Monitor the extremity during and after activity for any change in size, shape, tissue, texture, soreness, heaviness or firmness
- Maintain optimal weight.

### 3. *Avoid Limb Constriction*

- If possible, avoid having blood pressure taken on the at-risk extremity
- Wear loose fitting jewelry and clothing.

### 4. *Compression Garments*

- Should be well fitting
- Support the at-risk limb with a compression garment for strenuous activity (i.e. weight lifting, prolonged standing, running) except in patients with open wounds or with poor circulation in the at-risk limb
- Consider wearing a well-fitting compression garment for air travel.

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### 5. *Extremes of Temperature*

- Avoid exposure to extreme cold, which can be associated with rebound swelling, or chapping of skin
- Avoid prolonged (greater than 15 minutes) exposure to heat, particularly to hot tubs and saunas
- Avoid placing limb in water temperatures above 102° F (38.9° C).

### 6. *Additional Practices Specific to Lower Extremity Lymphedema*

- Avoid prolonged standing, sitting or crossing legs
- Wear proper, well-fitted footwear and hosiery
- Support the at-risk limb with a compression garment for strenuous activity except in patients with open wounds or with poor circulation in the at-risk limb.

**NOTE:** Given that there is little evidence-based literature regarding many of these practices, the majority of the recommendations **must** at this time be based on the knowledge of pathophysiology and decades of clinical experience by experts in the field (53).

### ***Infection***

Patients with lymphedema are at increased risk for developing infection in the affected area. It can develop very quickly or slowly over a number of weeks, and usually results from a break in the skin's protective barrier, such as eczema, ingrown toenails, scratches, insect bites, athlete's foot, etc. The signs and symptoms include swelling, inflammation (redness), warmth, pain, lymphangitis, and the patient may even experience skin blistering. More severe cases may demonstrate symptoms of chills, rigor, high fever, headache and vomiting. The two most common types of lymphedema-related infection are **cellulitis** and **erysipelas** (64).

Erysipelas is a painful skin infection that affects the skin plus the subcutaneous tissues and lymphatic structures that located just under the skin. Erysipelas requires prompt treatment with antibiotics and is caused by streptococci bacteria. It rapidly invades and spreads through the lymphatic vessels, causing damage and increasing the formation of fibrosis in the affected tissues. Erysipelas is one of the most common complications of lymphedema and tends to recur, especially in those with more advanced lymphedema (7,64).

Cellulitis is an infection that spreads freely, quickly, and uncontrollably within the deeper tissues of the skin. Cellulitis becomes a life-threatening emergency when it spreads through the lymphatic or circulatory systems and can reach vital organs and other body parts (lymphangitis), requiring prompt treatment with antibiotics. It is usually caused by the bacteria *Staphylococcus aureus* (7,64).

Patients, who exhibit the following indicators, will generally require hospital admission (65):

- Signs of septicemia (hypotension, tachycardia, severe pyrexia, confusion or vomiting)
- Continuing or deteriorating systemic signs, with or without deteriorating local signs, after 48 hours of oral antibiotics
- Un-resolving or deteriorating local signs, with or without systemic signs, despite trials of first and second line oral antibiotics.

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The Breast Disease Site Group of Eastern Health, following consultation with Infectious Diseases, recommends an antibiotic treatment strategy for patients with lymphedema who develop erysipelas/cellulitis (see Table 2)(54-58).

**Table 2: Antibiotics for the Treatment of Lymphedema-Related Erysipelas/Cellulitis**

Situation	First-line antibiotics	If allergy to Penicillin	Second-line antibiotics	Comments
<b>Home Setting</b> Acute cellulitis	Cloxacillin 500mg po q6h <u>or</u> Cephalexin 500 - 1000mg po q6h.	Clindamycin 300 - 450mg po q6h	Clindamycin 300 - 450mg po q6h. If fails to resolve, convert to intravenous (iv) regimen as per hospital admission	Treat for at least 10-14 days or longer if inflammation hasn't resolved.
<b>Hospital Admission</b> Acute cellulitis plus septicemia	Cefazolin 1-2g iv q8h  <b>Suspected MRSA:</b> Vancomycin 15mg/kg iv q12h maximum of 2g/day	Clindamycin 600 - 900mg iv q8h	Vancomycin 15mg/kg iv q12h maximum of 2g/day for presumptive MRSA. If poor response, rule out a collection in the affected area.	Switch to Cephalexin 500mg po q6h when: <ul style="list-style-type: none"> <li>• Afebrile for 48 hrs</li> <li>• Resolution of systemic symptoms</li> <li>• No further progression of cellulitis</li> </ul>
Prophylaxis to prevent recurrent cellulitis (2 or more episodes per year)	Penicillin V 500mg po q12h	Azithromycin 250mg po q24h	Azithromycin 250mg po q24h	After one year, consider decreasing dose of penicillin by half
Emergency supply of antibiotics (when away from home)	Amoxicillin-clavulanate 500mg po q8h	Clindamycin 300 - 450mg po q6h	If fails to resolve, or constitutional symptoms develop, convert to iv regimen as per hospital admission	Treat for at least 10-14 days or longer if inflammation hasn't resolved
In case of animal bite	Amoxicillin-clavulanate 500mg po q8h <u>or</u> 825mg po q8h or 12h	Doxycycline 100mg po q12h	Consult microbiology for cultures and sensitivity	Causes may be <i>Pasteurella multocida</i> , or <i>Capnocytophaga canimorsus</i> .

It is essential that patients diagnosed with cellulitis, who are being managed at home, be closely monitored by their family physician. The Eastern Health Breast Disease Site Group suggests that since antibiotic resistance is a growing public health issue, only those patients with lymphedema who experience two to three infections per year should be offered daily antibiotic prophylaxis (56,63,65).

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### Recommendations:

All patients diagnosed with secondary lymphedema, related to cancer or its treatment, should have access to effective and efficient management of the condition.

### Search Strategy:

Literature searches were conducted in Pubmed, CINAHL, and the Cochrane Library and using keywords “lymphedema” AND “neoplasm” and also “guidelines” as well as an extensive hand search of the reference lists of available literature articles. Guideline searches were also carried out on the websites of the world’s most highly respected cancer organizations and agencies. All selected literature articles and source guidelines were in English and dated after the year 2004, (unless the selection was a landmark study) up to September 2011. The inclusion/exclusion process consisted of selecting guidelines from reputable international cancer organizations, with preference given to those from Canadian sources where possible. From a total of eight source guidelines identified and reviewed, five were chosen because they were well developed, detailed and contained appropriate content (59-66).

The five identified source guidelines (62-66) were put through the ADAPTE process (67), including an AGREE II assessment (68), and the Northern Ireland, Clinical Resource Efficiency Support Teams’ “guidelines for the diagnosis, assessment and management of lymphedema” guideline was chosen to be adapted for use in our guideline (63). The CREST guideline was selected as the optimal choice due to its applicability, quality and currency of content.

There has been much debate but no consensus on the ‘grading of evidence’ in Canada. Presently, Canadian experts in the field of guideline development are involved in an ongoing in-depth analysis of the functionality of grading. Until such time as a report is released of their findings, and a consensus reached on assigning a grade of recommendation to a guideline, this group has decided to forgo the use of grading.

No competing or conflicts of interest were declared.

### Disclaimer:

These guidelines are a statement of consensus of the Breast Disease Site Group regarding their views of currently accepted approaches to diagnosis and treatment. Any clinician seeking to apply or consult the guidelines is expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient’s care or treatment.

### Contact Information:

For more information on this guideline, please contact Ms. Martina Reddick RN, Lymphedema Coordinator, Cancer Care Program, Eastern Health, St. John’s, NL; Telephone 709-777-8713. For more information on any of our guidelines, please visit our Cancer Care Program website at [www.easternhealth.ca](http://www.easternhealth.ca)

### Literature Support:

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NAME: \_\_\_\_\_  
OPIS: \_\_\_\_\_  
MCP: \_\_\_\_\_

**LYMPHEDEMA CLINIC**

**Referral Form**

Date: \_\_\_\_\_

Referred by:  Physician  Nurse  Radiotherapy  Self  Other

Primary Physician: \_\_\_\_\_

Presenting Problem: \_\_\_\_\_

Lymphedema found in:

Left  hand  arm  chest  back      Right  hand  arm  chest  
 back

Cancer status:

Disease free       recurrent disease – post treatment management requested

Additional Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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Patient Screening:

**Required prior to assessment**

- |  | <b>Yes</b>               | <b>No</b>                |
|--|--------------------------|--------------------------|
| 1. Recurrent Disease in affected arm/leg | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. DVT                                   | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Cellulitis                            | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Infection                             | <input type="checkbox"/> | <input type="checkbox"/> |

***Referring Physicians: If yes, please order appropriate diagnostics and treat as necessary prior to consultation.***

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**Clinical Appointment:**

**Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

July 5, 2005