

National Lymphedema Conference highlights

Moving evidence into practice

The 2021 National Lymphedema Conference was for the first time held virtually on Dec 3-4, 2021. This interactive, collaborative event was hosted by the Canadian Lymphedema Framework, in partnership with Wounds Canada. More than 45 presenters from Canada, USA, and abroad shared their knowledge and expertise with the delegates.

The conference was kicked off by a panel of keynote speakers including **Christine Moffatt** (UK), **David Keast** (Canada) and **Maryse Beaumier** (Canada) on how wounds and lymphedema are interrelated. Over one million Canadians live with chronic/lymphedema and approximately one third of those also suffer from chronic skin breakdown, especially in the lower extremity. Chronic Venous Insufficiency (CVI) is the number 1 underlying condition of lymphedema in Canada, with surgery and obesity, number 2 and 3. A subsequent session on CVI by **David Keast** (Canada) and **Tonny Karlsmark** (Denmark) examined the interconnected roles of the venous and lymphatic systems in managing tissue fluid, the relationship to chronic wounds and strategies to prevent and manage this problem.

Prospective surveillance for cancer-related lymphedema as a topic was covered by several speakers, including **Bolette Rafn** (Denmark) in her presentation on the tools and criteria used in research for defining sub-clinical and chronic lymphedema. **Cheryl Brunelle** (USA) summarized the current evidence base for early intervention while **Alphonse Taghain** (USA) presented the risk factors associated with breast cancer-related lymphedema, from data collected prospectively from a screening program of approximately 6,000 patients.

Dorit Tidhar (Israel) focused on measurement and evaluation and instructed delegates to make reliable decisions in the

lymphedema process of care. Determining the purpose of lymphedema treatment (volume reduction, no infection and better quality of life) is the first step before using MCID (minimal clinical important difference) to bring clarity.

Providing practical solutions and suggestions for therapists who manage lymphedema patients with complex situations was covered by **Heather Wyatt** (Canada) as well as **Shelley DiCecco** (USA) who focused specifically on creative management solutions for genital lymphedema.


Neil Piller's (Australia) introductory session, covered basic lymphatic system anatomy and pathophysiology, plus some of the risk factors, like being overweight, having multiple infections or being inactive. Those three risk factors were addressed in various sessions throughout the conference: Skin care to prevent recurring cellulitis by **Catherine McCuaig** (Canada); Debunking the myths of exercise and lymphedema by **Sandi Hayes** (Australia), **Naomi Dolgoy** and **Mona Al Onazi** (Alberta); and Obesity and its close association to lymphedema by **Raghu Kataru** (USA) and related potential therapeutic intervention strategies.

Anna Towers and **Marie Eve Letellier** (Canada) facilitated an interactive discussion of possible strategies to increase awareness and facilitate prevention and early treatment of obesity-related lymphedema, as these patients remain under-diagnosed and under-treated.

Videos of imagery in lymphedema clinical practice were shared by **Jean-Paul Belgrado** (Belgium). A surgical panel moderated by **Jay Granzow** (USA) provided an overview of surgical options, stressing the importance of careful patient selection, realistic expectations and the role of the therapist in surgery rehabilitation. **Wei Chen** (USA) and **Håkan Brorson** (Sweden) were two additional surgeons joining the panel.

Tobias Bertsch (Germany) presented the International Consensus on Lipedema and why a paradigm shift was needed to dispel numerous myths that have become widely accepted facts among health professionals and patients.

A highlight of the conference was Saturday's keynote address by Academy Award winner and LE&RN spokesperson, **Kathy Bates** (USA). Ms. Bates reflected back on her personal journey of living with lymphedema and her decision to become a global spokesperson and advocate for lymphedema. Her participation was made possible through Lymphatic Education and Research Network (LE&RN), who also sponsored the virtual screening of the play, "Lets Talk Lymphedema" on Friday evening.

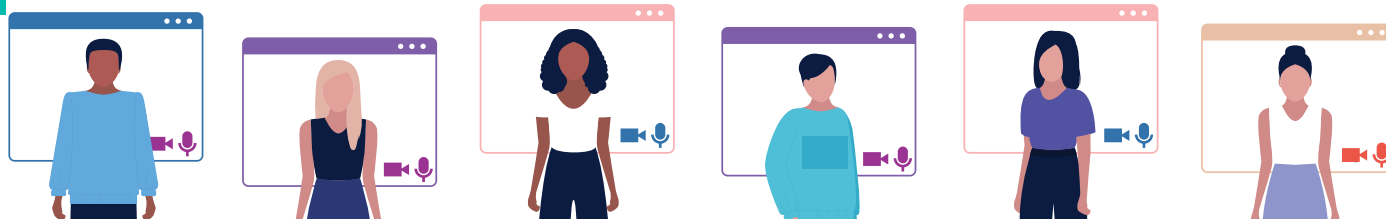
The CLF thanks both LE&RN and Wounds Canada for collaborating on our first venture into a virtual conference. The contributions by industry sponsors and 25 exhibitors made this conference a success. A synopsis of the oral abstracts submitted is on the following two pages. 

Did You Miss The Conference?

You can still register to gain access to on-demand viewing of presentations, posters and exhibitors until January 31, 2021.

Click here to register or visit canadalymph.ca/conference





Canadian Lymphedema Framework

National Lymphedema Conference

The scientific committee was extremely pleased with the quality of the submissions and level of expertise reflected in the abstracts submitted for the national lymphedema conference. Over the years we have seen how expertise has grown and matured and we applaud all those who presented an oral or poster presentation on Dec 3-4, 2021. In case you missed it—we've outlined all of the oral abstract presenters, their topics and a short summary of their presentation. You can still view all the accepted abstracts in their entirety (both oral and poster) online by clicking on the following link: www.canadalymph.ca/conference/abstracts.

ADVANCES IN OUTCOME MEASUREMENT AND PREVALENCE

Exploring the relationship among lymphedema, Body Mass Index and socioeconomic status

Keast DH, Janmohammad A

An administrative database of patients with a main diagnosis of lymphedema for clinic attendance was reviewed. Deidentified data were collected. Statistics Canada 2016 census data for median household income by postal code were obtained. A subset of those with body mass index equal to or greater than 30 (Class I, II or III obesity) was also analysed. Results indicate there is a possible association between lower socioeconomic status and lymphedema patients who have a comorbid factor of obesity.

LYMPH-Q Upper Extremity module: A rigorously developed, validated patient-reported outcome measure for arm lymphedema

Kaur M, Cornacchi S, Klassen A, Bordeleau L, Sawyer M, Pusic A

Patient-reported outcome measures (PROMs) are a series of questions that assess how patients feel and function. To date, a rigorously developed and validated PROM for arm lymphedema was lacking. To address this gap, we describe the development and ongoing work associated

with the LYMPH-Q Upper Extremity (UE) module. Next steps will involve the development and validation of the 3 new LYMPH-Q scales. The LYMPH-Q UE scales are available at no cost for research and clinical practice through www.qportfolio.org.

Axillary web syndrome scoring system

Letellier ME, Ibrahim M, Yung A, Towers A
To date, no scoring system exists to objectively score and triage the severity of AWS and prioritize rehabilitation needs. As resources are limited, the goal in developing an eventual valid and reliable AWS scoring system is to offer HP a systematic approach to track the severity and progression of this condition, facilitating optimum and timely patient care.

A virtual arm self-measurement protocol to reduce development of chronic upper extremity lymphedema after surgery for breast cancer

Zadavec K, Singh C, Rafn BS, Campbell KL
Assessing the feasibility and acceptability of self-measurement can inform testing and implementing virtually delivered, self-managed care for breast cancer-related lymphedema on a larger scale. This work can improve delivery of physiotherapy services for breast cancer by overcoming well-identified accessibility barriers across Canada, such as geography and availability of trained physiotherapists.

Exploring challenges and creativity in self-managing breast cancer-related lymphedema and work by U.S. Hispanic/Latina survivors: A case study approach using photo-elicitation

Anderson EA, Armer JA

A reciprocal relationship exists between BCRL self-management and work. This relationship requires creative ways to complete work and self-manage BCRL symptoms for life. Support of family, healthcare professionals, and work colleagues and adjustment of self-management behaviors to maximize work success optimizes quality of life. Optimizing survivorship care involves understanding cultural and personal views of work and social roles to effectively adapt BCRL self-management behaviors. Engaging with personal support networks can facilitate life-long self-management strategies.

ADVANCES IN LYMPHATIC SURGERY AND CARE

Vascularized lymph node transfers: systematic review

Chocron Y, Bouhadana G, Azzi AJ, Vorstenbosch J

Vascularized lymph node transfers (VLNT) are being used with increasing frequency for the treatment of breast cancer-related lymphedema (BCRL). These data suggest non-inferiority between the wrist and axilla

as recipient sites for VLNT in the context of BCRL. In the absence of randomized, prospective data, we hope these results can be used as an evidence-based reference and facilitate future studies.

Lymphaticovenous anastomosis and vascularized lymph node transfer for the treatment of lymphoedema—a single center case series

Bonapace-Potvin M, Lorange E, Tremblay-Champagne MP

Patients with lymphedema can benefit from microsurgery. The greatest effect of surgery is decreased dependence on daily compression garments to maintain a stable and reasonable limb volume. Almost all of our patients were able to cease daily compression garments. Reduction of limb circumference after one year was similar with LVA and VLNT. Episodes of cellulitis were significantly lower after intervention.

The utility of the omentum as a vascularized lymph node transfer donor site

Chocron Y, Kang V, Joshua Vorstenbosch J

Vascularized lymph node transfers (VLNT) are an emerging therapy for a select population of lymphedema patients. There are numerous available donor sites for VLNT including both visceral transfers from the omentum and peripheral sites such as the neck or groin. The omentum is an extremely versatile option for VLNT without any risk for donor site lymphedema and has been shown to offer positive outcomes for lymphedema patients. Future prospective studies are required to further corroborate these findings and offer a better understanding of risk profiles.

Public perspectives on lymphedema surgery

Almadani Y, Zhao H, Vorstenbosch J

This study uses a survey-based framework to assess the general public's perceptions of lymphedema surgery. Altogether, this study aids in determining the feasibility of implementing improved support and public funding for lymphedema surgery. This survey provides valuable new insight into the public perspectives of lymphedema and the desire to advocate

for the adoption of lymphedema surgery in Canada as a potential treatment. This survey is part of an ongoing endeavour to gauge the public's perceptions of lymphedema surgery.

Primary care provider barriers to cancer-related lymphedema care

Smith N, Chaput G

Although discussion around primary care providers and cancer-related lymphedema is scarce, current evidence suggests they face various barriers to caring for this condition, including poor knowledge and communication issues. As lymphedema care is an unmet need, and as prompt identification and management of this condition are of utmost importance, increased awareness and educational initiatives are warranted to better support primary care providers in caring for this condition.

COMPLEX AND CHALLENGING LYMPHEDEMA

Management of head and neck cancer related lymphedema

Ibrahim M, Letellier ME, Yung A, Cama G, Chaput G, Towers A

To date, little has been recorded on objectively measuring and recording head and neck lymphedema while comparing it to compression usage or not. Information on lymphedema management was scarcely collected, limiting our retrospective analysis. Our analysis indicated that the majority of the patients showed a reduction in their head and neck lymphedema despite not using compression garments. Future research is warranted to establish if interventions other than compression therapy play a role in favorable H&N lymphedema outcomes, such as H&N exercises and/or self-massage.

Urgent need for better recognition & effective treatment of deep central lymphatic dysfunction

Keith L, Bell K

We propose that deep central lymphatic injury-induced lymph stasis results in inflammation and fibrosis to the organs and not only negatively impacts organ function, but also the transport capacity of the entire lymphatic system.³ In the presence of deep

central lymphatic impairment, traditional use of superficial anastomoses pathways to decongest peripheral edema will only be marginally successful. Prolonged peri-organ lymph stasis combined with deep central lymphatic impairment leads to fibrosis, decreased organ function, and further lymphatic failure. Decongestion of peripheral lymphedema will be limited unless the deep central lymphatic impairment is addressed.

Patients who overtreat themselves: obsessive compulsive disorder and body dysmorphic syndrome in lymphedema practice

Towers A

All seasoned lymphedema practitioners will have patients who seem obsessed with lymphedema compression, lymphatic drainage or exercise, at a level that is inappropriate to their condition and which in fact may cause harm. Following a brief overview of the psychiatric definitions of OCD and BDS, this composite case presentation will outline some characteristics of lymphedema patients who exhibit symptoms or signs of these disorders that impact their lymphedema care and their general health.

EXERCISE

Opposing information: Debunking the myths around resistance and strength training exercise in cancer related lymphedema

Al Onazi M, Dolgoy N

Growing research in cancer-related lymphedema supports the benefits of resistance exercise in improving muscle strength, functional engagement, and quality of life, without exacerbating lymphedema symptoms. Despite the evidence, the common clinical recommendations advise individuals with or at risk of developing lymphedema to avoid resistance activities. This patient-centered workshop aims to share current research findings and translate their importance into patient outcomes. Individuals with or at risk of lymphedema will learn about exercise principles and ways to add resistance into activities. [L2](#)

www.canadalymph.ca/conference