

Dr. Vodder School™ INTERNATIONAL Authorized by the original Dr. Vodder Schule - Austria

VOLUME 1 ISSUE 1

NOVEMBER 2010

Inside this issue:

Editorial	1
Lymph Taping	1-
Near-infrared (NIR) Fluorescence	3
Articles	4
Conferences	4
Administration	4

VODDER NEWS

Editorial

Robert Harris, HND, RMT, CLT-LANA

Welcome to our first issue of Vodder News. This Newsletter is intended for all interested in the work of the Dr. Vodder School and its therapists. There will be current articles and news items, research updates and information about new events we are hosting. Please enjoy our first issue and bookmark the website location on your browser for future reference.

We have been introducing elastic taping procedures to our therapists for many years. Our therapists

report good results but there has been little documented evidence for the efficacy of this adjunctive treatment. One of our European Vodder therapists, Joyce Bosman, PT has now conducted research at Flinders' Medical Centre in Adelaide, Australia with Prof. Neil Piller and a summary is given below. Also this issue explains a new imaging procedure undergoing research trials in Houston, TX. Some of our Vodder trained therapists are involved in this research 8

Lymph Taping: a welcome addition in the management of seroma after breast cancer surgery?? Jovce Bosman, PT

Breast cancer is treated with either modified

radical mastectomy

(MRM) or wide local excision (WLE) and

axillary lymph node

dissection (ALND), or

sentinel lymph node

Common complications of breast surgery are

bleeding, infection,

(SLNB).

biopsy

Joyce Bosman

lymphoedema and nerve damage. The most common complication following breast surgery is seroma formation. Incidence of seroma formation after breast surgery varies between 2.5% and 51%. However, in our every day practice this complication is regarded as normal, rather than being a serious complication. Vitug & Newman report the need for seroma aspiration in 10% to 80% of ALND and mastectomy cases. Every aspiration might cause infection or oedema and using a less invasive treatment for this complication would be preferable in the management of seroma.

Various methods have been used to prevent seroma formation. Gardner et. al. evaluated the evidence of the current methods. Evidence on the effect of drains and seroma formation is inconclusive. Techniques of suturing mastectomy and axillary flaps to underlying tissue have been well described and seem to be an efficacious option for reduction of seroma. There are mixed results reported for the use of tissue adhesives. Most of the larger trials in human mastectomy wounds do not show any appreciable benefit, and their use cannot be recommended at present without further evidence. Immobilization of the shoulder until day 7 post-operatively, significantly reduced the incidence of seroma. However, this is inconvenient due to short-term shoulder immobilization and a risk

of longer-term loss of range of motion. The use of tranexamic acid medication shows a likely discharge of patients 0.9 days earlier with fewer seroma aspirations, but more research needs to be conducted to clarify its role and best route of administration. Seroma is defined as a serous fluid collection that develops under the skin flaps during mastectomy or in the axillary dead space after axillary dissection. Many causes have been investigated, but disruption



Seroma

of the lymphatic channels in the axilla is most likely. Seroma formation generally begins on the 7th day after operation, reaches a peak rate of growth on the 8th day, and subsequently slows continuously up to the 16th day after operation. The composition of the fluid and aspirates and the time related changes of the investigated criteria suggested that 1) seroma is not an accumulation of serum, but an exudate, 2) the exudate is an element in an acute inflammatory reaction, i.e. the first phase of wound repair, and 3) seroma formation reflects an increased intensity and a prolongation of this phase. Although seroma is not life threatening, it can lead to significant morbidity (e.g. flap necrosis, wound dehiscence, predisposition to sepsis, prolonged recovery period, multiple



Dr. Vodder School™

INTERNATIONAL

ized by the original Dr. Vodder Schule - Au

Lymph Taping Cont'd from page 1

Cont a from page 1

physician visits) and may delay adjuvant therapy. Gardner et. al. reported that factors statistically associated with higher rates of seroma included old age, higher weight, increased drain fluid volume in the first 72 hours, use of electrocautery, and choice of operation (MRM vs WLE). Other factors such as tumor size and number of lymph nodes removed were not significant in some trials but achieved significance in others.

It is common for people who have had their lymph nodes removed to experience fullness under the arm after the drain has been removed. People often describe it as like having a ball fixed in the armpit. As with a haematoma, this fluid is reabsorbed by the body over time. However, if it causes discomfort or is persistent, the specialist or breast care nurse may decide to draw off the fluid using a small syringe and needle. In some cases, the fluid collection may recur so this may need to be done more than once. The use of fine needle aspiration to assess changes in an oedematous breast can be problematic and may, in itself, produce additional inflammation and oedema.

Several interventions have been reported with the aim of reducing seroma formation including the use of a pressure garment and prolonged limitation of arm activity. However, it has been suggested that the use of



Lymph taping back

these interventions not only reduces seroma formation, but also may increase the incidence of seroma formation after removal of the drain and might even cause shoulder dysfunction. Seroma formation after breast cancer surgery is independent of duration of drainage, compression dressing and other known prognostic factors in breast cancer patients except the type of surgery, i.e. there is a 2.5 times higher risk of seroma formation in patients undergoing modified radical mastectomy compared to wide local excision. The use of taping in the management of seroma is gaining popularity, and there is significant clinical experience in this approach but little published research. Lymph Taping is a part of the Medical Taping Concept that contributes to stimulate lymphatic drainage. It is applied to the drainage area of the affected oedematous limb. The special tape has the same elasticity as the skin and is similar in weight to the epidermis. By applying the tape from proximal to distal and during application, positioning the body in a way that the tape is stretched, lymphatic drainage is stimulated 24 hours a day. The tape must be applied in accordance with the anatomy of the lymph pathways. The tape lifts the skin slightly and as a result, the lumen of the lymph angions are opened. The pressure on the blood vessels is reduced. Moreover the tape becomes a conductor of interstitial fluid, moving fluids from areas of higher pressure towards areas of lower pressure. The tape may also influence deeper lymphatics and encourage myofascial release, enhancing drainage in the intrafascial lymphatics.

For the management of seroma, the tape is cut into 3 strips and applied over the watershed between skin territories on the back of the patient from spine to axilla. The patient is positioned so the skin is at a slight stretch before application of the tape. Once the skin returns to its normal position, it is drawn up to create an underlying negative pressure. Professor Neil Piller and I conducted a study at Flinders Medical Centre, Adelaide, Australia to investigate the use of lymph taping in the management of seroma using the Cure Tape[®] product. The results of this study will be published this year. In the meantime I encourage all Dr. Vodder therapists to start using lymph taping in the management of seroma and get your own clinical experience. This will be a great benefit to your patient! Joyce Bosman, PT is a Dr. Vodder certified therapist living in Holland.

References

- 1. Hashemi, E; Kaviani, A;Najafi, M; Ebrahimi, M; Hooshmand, H; Montazeri, A. Seroma formation after surgery for breast cancer. *World J Surg Oncol.* 2004;2:44.
- Gonzalez, EA; Saltzstein, EC; Riedner, CS; Nelson, BK. Seroma formation following breast cancer surgery. *The Breast Journal*. 2003; volume 9, number 5:385-388.
- Vitug, AF; Newman, LA. Complications in breast surgery. Surg Clin N Am. 2007;87: 431-451
- Gardner, A; Pass, HA; Prance S. Techniques in the prevention and management of breast seroma: An evaluation of current practice. *The Women's Oncology Review*. 2005;5(3):135-143§

THE QUALITY IS IN OUR HANDS: TRAINING EXCELLENCE

Page 2

needle aspiration to assess changes in an oedematous breast can be problematic and may, in itself, produce additional inflammation and oedema."

"The use of fine

Near-infrared (NIR) fluorescence imaging of lymphatic structure and function – A Research Study David Kleiman, RN, MS



Clinical studies are underway to evaluate a novel approach to image lymphatic structure and function. The technique uses a non-radioactive dye that is injected intradermally and is then sequestered by nearby lymphatic vessels. The dye has been used for

Injected initiaterimity and is their sequestered by nearby lymphatic vessels. The dye has been used for several decades in other medical applications and to date; no adverse affects have been documented for subjects with lymphedema. A light similar to the light from a grocery store scanner is shined on the skin and penetrates to interact with the injected dye. The fluorescent signal from the dye, travels through tissue, and is collected by a special camera for dynamic, realtime imaging of lymph flow [1]. The figure below pictures the dye moving proximally in the lymphatics originating from the injection sites on the back of the right hand.

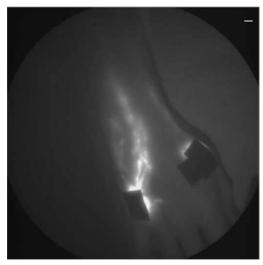


Figure 1-Right hand (taken from [1])

In a previous study, this experimental imaging technique has been used to evaluate lymphatic response to pneumatic compression devices (PCDs) for subjects with breast cancer-related lymphedema (BCRL) [2]. Management with PCDs is controversial, owing to the lack of methods to directly assess benefit. This pilot study measured lymphatic propulsion rate, apparent lymph velocity, and lymphatic vessel recruitment before, during, and after advanced PCD therapy. Lymphatic function improved in all control subjects and all asymptomatic arms of BCRL subjects. Lymphatic function improved in 4 of 6 BCRL affected arms, improvement defined as proximal movement of dye after therapy. NIR fluorescence lymphatic

imaging may be useful to directly evaluate lymphatic response to therapy. These results suggest that PCDs can stimulate lymphatic function and may be an effective method to manage BCRL, warranting future clinical trials.

An ongoing clinical trial (NCT00833599) funded by the National Heart, Lung, and Blood Institute is combining the NIR imaging technique with a genetic analysis of mutations that may be found in persons with lymphatic dysfunction. Subjects with lymphedema of either the upper or lower extremities are being evaluated. The objective is to correlate the genetic findings with the phenotypical data revealed from the NIR imaging. Recruitment is ongoing with an emphasis on families with more than one affected member.

In addition to the study using PCDs, the technology has also been used in a compassionate use case [3]. The case study, funded in part by the National Cancer Institute's Network for Translational Research, involved a 50-year-old male with lymphedema of the eyelids, tongue, face and cheeks secondary to cancer treatment. The subject was injected with the dye and NIR fluorescent imaging was used to direct manual lymphatic drainage (MLD). Three-dimensional surface profilometry was used to monitor response to the therapy. The imaging technique provided mapping of functional lymph vessels so that MLD could be directed in a more effective manner.

For more information please contact: *Milton V. Marshall, PhD, DABT*: (713)500-3562 Milton.Marshall@uth.tmc.edu

References

- J. C. Rasmussen, I. C. Tan, M. V. Marshall, C. E. Fife, and E. M. Sevick-Muraca, "Lymphatic imaging in humans with near-infrared fluorescence," Curr. Opin. Biotechnol. 20(1), 74–82 (2009).
- K.E. Adams, J. C. Rasmussen, C. Darne, I. C. Tan, M.B. Aldrich, M.V. Marshall, C.E. Fife, E.A. Maus, L.A. Smith, R. Guilloid, S. Hoy, E.M. Sevick-Muraca, "Direct evidence of lymphatic function improvement after advanced pneumatic compression device treatment of lymphedema", Biomed. Optics Express. 1(1), 114-125 (2010).
- 3. E. A. Maus, I.C. Tan, J.C. Rasmussen, M.V. Marshall, C.E. Fife, L.A. Smith, R. Guilliod, E.M. Sevick-Muraca, "Near-infrared fluorescence imaging of lymphatics in head and neck lymphedema", Head & Neck, unpress, (2010)§

Dr. Vodder School^T INTERNATIONAL Authorized by the original Dr. Vodder Schule - Austria

> "NIR fluorescence lymphatic imaging may be useful to directly evaluate lymphatic response to therapy."



Dr. Vodder School™ INTERNATIONAL rized by the original Dr. Vodder Schule - Austria

A division of Vodder Schools International Ltd.

PROFESSIONAL TRAINING IN MANUAL LYMPH DRAINAGE & COMBINED

DECONGESTIVE

THERAPY

Tel: (250) 598-9862 Fax: (250) 598-9841 info@vodderschool.com www.vodderschool.com

P.O. Box 5121 Victoria BC Canada, V8R 6N4

Articles

The Effect of Manual Lymph Drainage (MLD) on muscle enzymes after treadmill exercises.

Schillinger A, et. al: Effect of Manual Lymph Drainage on the Course of Serum Levels of Muscle Enzymes After Treadmill Exercise. 2006; Am. J. Phys. Med. Rehabil. • Vol. 85, No. 6

Improving muscular recovery after exercise is an important topic in sports medicine. The aim of this study was to evaluate the effect of MLD on the course of muscle enzymes after treadmill exercise. 14 athletes (7 women, 7 men) were included in the study. The participants underwent a graded exercise test on a treadmill ergometer to determine the individual anaerobic threshold (IAT). Seven days after the graded exercise test, all subjects performed 30 minutes of treadmill exercise at an intensity

Conferences 2010/2011

Lymphovenous Association of Ontario conference November 20, 2010, Toronto, ON Contact: www.lymphontario.org

International Lymphoedema Conference

(Lymphoedema Framework Project) June 16 - 18 2011, Toronto, Canada Contact: www.lymphormation.org

Administration

Facebook/Twitter/Blog spot

If you are interested in getting short updates on news from the Dr. Vodder School, go to the top right hand corner of our website home page and log on. You will automatically receive any of the brief updates we post.

MLD / CDT course forms now available online.

We are slowly coming into the 21st Century!! We have recently put together application forms that can be filled out on line and sent by email. All you have to do is fill out the application online and simply hit the Submit button. It will be sent directly to the office via

equivalent to IAT. The subjects were randomized into two groups of seven persons. One group was treated with manual lymph drainage (MLD), whereas the control group (CG) received no treatment after the endurance exercise at IAT level. After an increase immediately after the exercise, a fast decrease in lactate dehydrogenase (LDH) and in aspartate aminotransferase (AST) concentration was observed, with significantly lower values for LDH after 48 hrs in the subjects having received lymph drainage treatment. The course of creatine kinase (CK) levels was comparable, but did not reach significance. Manual lymph drainage after treadmill exercise was associated with a faster decrease in serum levels of muscles enzymes. This may indicate improved regeneration processes related to structural damage to muscle cell integrity.§

International Society of Lymphology conference September 19 – 23, Malmo, Sweden Contact: www.lymphology2011.com§

email.

This will help out all of those who don't have a fax machine or no longer use one. Also save money on stamps for those who like to pay by credit card! If you prefer to send a check, you can print off the completed form and mail it to us.

The forms can be found on our website under the course you are interested in but please remember these are only available for the courses that are organized by the Dr. Vodder School International. For courses organized by others, please contact them directly for application forms.§

THE QUALITY IS IN OUR HANDS: TRAINING EXCELLENCE

Dr. Vodder School - International Therapist Schedule

<u>Course</u>	<u>Date</u>	<u>Location</u>	<u>Organizer</u>	<u>Instructor</u>	<u>Contact Info</u>
Basic (5 d					
	11/08/10	Northampton, MA	Therapeutic Lymphatic Consulting	Kathy Fleming	phone:413-210-2414; email:kjfmldpt@aol.com
	11/15/10	New York, NY	The Open Center	Kathy Fleming	phone:212-219-2527; email:registration@opencenter.org
	01/17/11	Beverly Hills, CA	The Bramham Institute/ ASTECC	Anne Bramham	phone:877-900-0086; email:info@astecc.com
	01/17/11	Perth, WA	Ros Roberts	Janet Douglass	phone:08 9293 2697x+61; email:yoorooga@iinet.net.au
	01/19/11	Toronto, ON	Dr. Vodder School International	Sandra MacDonald	phone:(250) 598-9862; email:info@vodderschool.com
	02/07/11	Adelaide, SA	Jan Douglass	Janet Douglass	phone:+61 419 848 589; email:jandouglass@bettanet.net.au
	02/23/11	Virginia Beach, VA	Cayce/Reilly School of Massotherapy	Kathryn Thrift	phone:757-428-3588x7285; email:workshops@edgarcayce.org
	02/28/11	Sydney, NSW	Jan Douglass	Janet Douglass	phone:+61 419 848 589; email:jandouglass@bettanet.net.au
	03/14/11	Melbourne, VIC	Deb Bower	Janet Douglass	phone:(041) 855-1546; email:debs@rabbit.com.au
	03/23/11	Houston, TX	Cayce/Reilly School of Massotherapy	Kathryn Thrift	phone:757-428-3588x7285; email:workshops@edgarcayce.org
	04/10/11	Palm Beach, FL	The Bramham Institute/ ASTECC	Anne Bramham	phone:877-900-0086; email:info@astecc.com
	04/11/11	Victoria, BC	*Dr. Vodder School International	Catherine DiCecca	phone:(800) 522-9862; email:info@vodderschool.com
	05/02/11	Anchorage, AK	Sharon (registration)	Hildegard Wittlinger	email:info@iaom-us.com
	06/18/11	Toronto, ON	Dr. Vodder School International	Sandra MacDonald	phone:(250) 598-9862; email:info@vodderschool.com
	07/13/11	San Diego, CA	Beauty Kliniek - Linda Anne	Kathryn Thrift	phone:(619) 525-7791 ; email:info@beautykliniek.com
	10/18/11	Victoria, BC	*Dr. Vodder School International	Linda (Koby) Blanchfield	phone:(800) 522-9862; email:info@vodderschool.com
	10/19/11	Virginia Beach, VA	Cayce/Reilly School of Massotherapy	Kathryn Thrift	phone:757-428-3588x7285; email:workshops@edgarcayce.org
Basic Free	nch (5 day)				
	12/04/10	Montreal, QC	Institut Kine Concept	Michel Eid	phone:514-272-5463; email:info@kineconcept.com
	03/02/11	Montreal, QC	Institut Kine Concept	Michel Eid	phone:514-272-5463; email:info@kineconcept.com
I					

*denotes consecutive class

Dr. Vodder School - International Therapist Schedule

<u>Course</u>	Date	Location	Organizer	Instructor	<u>Contact Info</u>
	ich (5 day) Cont'c				<u>contact mjo</u>
Dasic Tren	06/04/11	<u>.</u> Montreal, QC	Institut Kine Concept	Michel Eid	phone:514-272-5463; email:info@kineconcept.com
Therapy I	(5 day)		·		
	11/13/10	Burlington, ON	Burlington cancer and Lymphedema Centre	Linda (Koby) Blanchfield	phone:905-332-6542; email:kboersengladman@rogers.com
	11/17/10	Hallandale, FL	Healing Hands Seminars	Kathryn Thrift	phone:(954) 455-2108; email:healinghandsseminars@yahoo.com
	01/24/11	Perth, WA	Ros Roberts	Janet Douglass	phone:08 9293 2697x+61; email:yoorooga@iinet.net.au
	02/14/11	Adelaide, SA	Jan Douglass	Janet Douglass	phone:+61 419 848 589; email:jandouglass@bettanet.net.au
	03/07/11	Sydney, NSW	Jan Douglass	Janet Douglass	phone:+61 419 848 589; email:jandouglass@bettanet.net.au
	03/21/11	Melbourne, VIC	Deb Bower	Janet Douglass	phone:(041) 855-1546; email:debs@rabbit.com.au
	04/13/11	Virginia Beach, VA	Cayce/Reilly School of Massotherapy	Kathryn Thrift	phone:757-428-3588x7285; email:workshops@edgarcayce.org
	04/17/11	Victoria, BC	*Dr. Vodder School International	Robert Harris	phone:(800) 522-9862; email:info@vodderschool.com
	05/09/11	Anchorage, AK	Sharon (registration for course)	Hildegard Wittlinger	email:info@iaom-us.com
	05/11/11	Houston, TX	Cayce/Reilly School of Massotherapy	Kathryn Thrift	phone:757-428-3588x7285; email:workshops@edgarcayce.org
	07/09/11	Toronto, ON	Dr. Vodder School International	Robert Harris	phone:(800) 522-9862; email:info@vodderschool.com
	07/20/11	San Diego, CA	Beauty Kliniek - Linda Anne	Kathryn Thrift	phone:(619) 525-7791 ; email:info@beautykliniek.com
	10/24/11	Victoria, BC	*Dr. Vodder School International	Robert Harris	phone:(800) 522-9862; email:info@vodderschool.com
Therapy I French (5 day)					
	07/09/11	Montreal, QC	Institut Kine Concept	Marie-Christine Sansoube	phone:514-272-5463; email:info@kineconcept.com
Therapy II & III (10 day)					
	11/21/10	Toronto, ON	Dr. Vodder School International	Robert Harris	phone:(800) 522-9862; email:info@vodderschool.com
	01/24/11	St. Pete Beach, FL	Dr. Vodder School International	Robert Harris	phone:(800) 522-9862; email:info@vodderschool.com
	03/27/11	Melbourne, VIC	Deb Bower	Robert Harris	phone:(041) 855-1546; email:debs@rabbit.com.au

*denotes consecutive class

Dr. Vodder School - International Therapist Schedule

<u>Course</u>	<u>Date</u>	<u>Location</u>	<u>Organizer</u>	<u>Instructor</u>	<u>Contact Info</u>
Therapy II	& III (10 day) C	cont'd			-
	04/26/11	Victoria, BC	Dr. Vodder School International	Robert Harris	phone:(800) 522-9862; email:info@vodderschool.com
	05/30/11	Stowe, VT	Dr. Vodder School International	Robert Harris	phone:(800) 522-9862; email:info@vodderschool.com
	06/20/11	Walchsee, Austria	Dr. Vodder Schule Austria	Hildegard Wittlinger	phone:+43 (0)5374 5245-0 ; email: office@wittlinger-therapiezentrum.com
	10/31/11	Victoria, BC	Dr. Vodder School International	Robert Harris	phone:(800) 522-9862; email:info@vodderschool.com
Therapy II	& III French (10	<u>) day)</u>			
	08/22/11	Montreal, QC	Institut Kine Concept	Monica Coggiola	phone:514-272-5463 ; email:info@kineconcept.com
Vodder Review / Recertification (3 day)					
	11/20/10	Toronto, ON	Dr. Vodder School International	Robert Harris	phone:(800) 522-9862; email:info@vodderschool.com
	01/21/11	St. Pete Beach, FL	Dr. Vodder School International	Hildegard Wittlinger	phone:(800) 522-9862; email:info@vodderschool.com
	03/30/11	Melbourne, VIC	Deb Bower	Robert Harris	phone:(041) 855-1546; email:debs@rabbit.com.au
	04/29/11	Victoria, BC	Dr. Vodder School International	Hildegard Wittlinger	phone:(800) 522-9862; email:info@vodderschool.com
	05/27/11	Stowe, VT	Dr. Vodder School International	Hildegard Wittlinger	phone:(800) 522-9862; email:info@vodderschool.com
	07/04/11	Walchsee, Austria	Dr. Vodder Schule Austria	Hildegard Wittlinger	phone:+43 (0)5374 5245-0 ; email: office@wittlinger-therapiezentrum.com
	08/31/11	Halifax, NS	Dr. Vodder School International	Robert Harris	phone:(800) 522-9862; email:info@vodderschool.com

Advanced Courses

(at least 135 hours of MLD training required)

Advanced Creative Bandaging					
01/23/11	St. Pete Beach, FL	Dr. Vodder School International	Renee Romero	phone:(800) 522-9862; email:info@vodderschool.com	
05/29/11	Stowe, VT	Dr. Vodder School	Renee Romero	phone:(800) 522-9862;	
	510WE, V1	International		email:info@vodderschool.com	
Elastic taping / Coopee Test (1 days)					
01/20/11	St. Pete Beach, FL	Dr. Vodder School	ol Ruth Coopee	phone:(250) 598-9862;	
01/20/11	SI. PELE DEALII, FL	International		email:info@vodderschool.com	
05/30/11	Stowe, VT	Dr. Vodder School	Ruth Coopee	phone:(250) 598-9862;	
		International		email:info@vodderschool.com	
The Conscious Clinician (1 days)					
05/26/11	Stowe, VT	Dr. Vodder School	Sara Nelson	phone:(250) 598-9862;	
		International		email:info@vodderschool.com	

*denotes consecutive class

Dr. Vodder School - International, P.O. Box 5121, Victoria, B.C. Canada V8R 6N4 Tel: (250) 598-9862 Fax: (250) 598-9841 info@vodderschool.com www.vodderschool.com A division of Vodder Schools International Ltd