

## IMPORTANCE OF TREATING TRUNCAL AND CHEST LYMPHEDEMA

Lymphedema is rarely confined to just the obviously swollen limb; in many if not most cases the lymphedema extends into adjacent body quadrants. The fact that adjacent truncal lymphatics must be treated in addition to the affected lymphedematous limb is well-established in the lymphedema medical community and is an important part of clinical decision making about lymphedema treatment, as is well-documented in current medical texts:

“Physician examination may reveal a swollen limb; however, it must be understood that *lymphatic congestion involves not only the extremity but, in many cases, also parts of the torso, and goes far beyond what is clinically evident*. To properly treat lymphedema, this must be recognized. *Treatment of what appears to be a local symptom probably will not solve the ultimate problem...The physician must understand this to prescribe appropriate treatment* [emphasis added].”<sup>1</sup>

“It should also be mentioned that removal of axillary or inguinal nodes cuts off not only the collectors of the corresponding extremity, *but also those of the adjacent body quadrant. Congestion also develops in the adjacent body quadrant, and the valves of its collectors become insufficient*. Therefore, massage in the quadrants next to a congested extremity can facilitate the retrograde transport of lymph to adjacent territories [emphasis added].”<sup>2</sup>

“...for example, in lymphedema of an extremity, *lymphostasis usually also affects the neighboring quadrant of the trunk...* [emphasis added]”<sup>3</sup>

Failure to recognize the importance of treatment to truncal lymphatics ignores well-documented risks associated with use of pumps that treat only the affected limb, including 1) pooling of fluid at the top of the limb because it cannot get past the damaged axillary or inguinal node area; 2) development of a fibrotic band at the top of the limb appliance, further damaging fragile lymphatics, and 3) development of new areas of edema in the genitalia, abdomen, hips, trunk or chest. Key research on the subject studied 128 patients with lower limb lymphedema: of the 75 who did not use a pump [*with limb appliances only*], only 2 developed genital lymphedema; of the 53 who used a pump (with an appliance that treated only the leg), 23 developed genital edema. Researchers concluded these statistically significant findings demonstrated pump use resulted in “an unacceptably high incidence of genital edema.”<sup>4</sup> Those findings are not particularly surprising when considering the lymphatic physiology:

“In the case of inguinal lymphonodectomy, the congestion affects not only the extremity, but also the genital region. The severe and long-lasting swelling of

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<sup>1</sup> Zuther JE. *Lymphedema Management: The Comprehensive Guide for Practitioners*. New York NY: Thieme Medical Publishers, Inc 2005: p.64

<sup>2</sup> Foldi M, Foldi E, Kubik S. *Textbook of Lymphology for Physicians and Lymphedema Therapists*. 1<sup>st</sup> Ed. 2003 Urban & Fischer; English text revised by Biotext, LLC, San Francisco CA: 112, 282-283.

<sup>3</sup> Ibid, p 282.

<sup>4</sup> Boris M, Weindorf S, Lasinski BB. The risk of genital edema after external pump compression for lower limb lymphedema. *Lymphology* 1998; 31: 15-20.

the external genitals can be explained by the fact that lymph can cross the median watershed of this area only via the cutaneous [lymph vessel] network.

Because the adjacent trunk quadrant belongs to the tributary area of the axillary (or inguinal) lymph nodes, pneumomassage [pneumatic compression pump] transfers the edema fluid from the lymphedematous limb into the lymphedematous trunk quadrants and...even into the genitalia. Lymphedema of the genitalia is disastrous.”<sup>5</sup>

“-but what happens when [lymphatic vessel] drainage is either inadequate or is blocked further along the lymphatic drainage system? Then the region just proximal to the ‘sleeve’ of the pump becomes overloaded. The lymphatics often rupture and leak lymph to form a new area of lymphoedema. This can lead to the formation of fibrous tissue like a ‘cuff’ around the upper part of the limb. This then contracts and strangles remaining lymphatics. Any nodes which remain...are already overloaded...thus their ability to collect from adjacent areas is reduced, e.g. from the chest wall for lymphoedema of the arm.

We know of many cases where the genital areas...were made lymphoedematous by pumps...They can cause lymphoedema in an arm, breast...lymphoedema of the abdomen may be caused, or made much worse.”<sup>6</sup>

Clearly, the evidence supporting treatment of truncal lymphatics cannot be disregarded. Pneumatic compression of lymphedematous areas is an accepted treatment; that treatment must extend to lymphatics of the chest and trunk based on the physiology of the lymphatic system as well as the evidence outlined above. The Flexitouch system is the only pneumatic compression device that offers appliances that apply therapy to chest and trunk lymphatics.

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<sup>5</sup> Foldi, op. cit., p. 112

<sup>6</sup> Casley-Smith JR, Casley-Smith Jr, Other treatments for lymphoedema.  
[http://www.lymphoedema.org.au/tret\\_oth.html](http://www.lymphoedema.org.au/tret_oth.html)