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LETTER TO THE EDITOR

MLD'S FUTURE?

Concerning: K. Johansson, K. Karlsson, P. Nikolaidas: EVIDENCE BASED OR TRADITIONAL TREATMENT OF CANCER-RELATED LYMPHEDEMA [Lymphology 48 (2015), 24-27]

Keywords: cancer, lymphedema, treatment, manual lymph drainage, compression, exercise, evidence-based

I read with interest the article by Johansson and colleagues concerning treatment of cancer-related lymphedema (1). In lymphedema management, there are global variations in treatment approaches. Clinicians should remain open and flexible to treatment options as well as patient goals.

I agree with the authors that early diagnosis of the latent phase of lymphedema, diagnosed by using newer technologies such as bioimpedance spectroscopy and indocyanine green analysis, may well help to guide appropriate treatment.

The authors assert that based on more recent research, a paradigm shift in therapy is needed. The selected articles by Huang and McNeeley do not amount to conclusive evidence and meta-analysis and systematic reviews also carry bias. McNeeley (2) reported that MLD has a positive effect in mild cases of lymphedema. Karadibak (3) demonstrated that the addition of MLD to a CDT protocol significantly increased edema reduction and shoulder mobility. Tan (4) has also shown conclusively that MLD increases lymph flow, and Zimmerman (5) supported the use of MLD in preventative, early intervention with breast cancer patients.

The authors advocate the use of self MLD although evidence from Williams et al (6) has demonstrated that this has little effect, at least in volume reduction, compared to therapist-applied MLD.

Compression therapy and physical activity may be applicable to early or minimal lymphedema but will not address fibrosis and heavy extremity swelling, papillomatosis etc., associated with more complex cases. A recent randomized control study demonstrated no benefit from Class II compression stockings in preventing lymphedema in lower extremities (7). Chest and breast edema can be very challenging to manage with compression alone whereas MLD can be a useful tool. Application of MLD is dependent on the stage of lymphedema, location, other comorbidities, skin changes, etc.

MLD may well provide additional benefits to patients other than edema reduction, such as pain reduction and improvement in quality of life. Patients become frustrated when the therapist imposes their vision of treatment, which may be exercise and compression therapy. We should be advocating for treatment that patients find beneficial within a patient-centered, collaborative, and holistic approach to treatment.

Dependency on a lymphedema therapist can also arise using compression therapy and exercise. The therapist has a responsibility to ensure that patients are not 'over-treated' no matter which modality is employed. It is

unfortunate that time constraints placed on a physiotherapist may require justification to eliminate the most time-consuming yet effective component of treatment.

Targeting individual treatment to patient goals is paramount, and MLD is an important part of therapy when required. There is both evidence and tradition supporting the use of MLD in lymphedema management and we should not discard an effective modality based on limited evidence.

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RESPONSE

Thank you for your valuable comments to our article. It is obvious that a robust discussion is needed for this topic for the benefit of the field and our patients.

We do agree with you that solitary studies have proven MLD to be effective, however mostly with reports of very small amount of changes. Some have also been contradicted, for example the work of Devoogdt et al (1) demonstrating the "preventative" MLD was not effective. As a scientific society, the ISL must acknowledge scientific methods. Though systematic reviews and meta-analyses can carry bias, they are still one of the most reliable tools within the scientific world to determine the effectiveness of a treatment method. After our article had been submitted, a Cochrane review (2) was published reporting "that individuals with mild-to-moderate BCRL are the ones who may benefit from adding MLD to an intensive course of treatment with compression bandaging." As the result was based on a single study, it was also stated that "This finding, however, needs to be confirmed by further research".

The conclusion of the Cochrane report highlights the importance of taking a further step into research by trying to identify specific groups of patients needing individualized kinds of treatments. You mention MLD for pain treatment and that is a good example. The touch of the hand on the skin by MLD treatment may very well act as a gate-effect and thereby ease pain. But is it really professional to treat pain in general by just using MLD? The patient should demand a proper pain diagnosis which most likely will result in more effective pain treatment than the one of MLD.

We do agree on a patient-centered, collaborative, and holistic approach to treatment. Another holistic approach than MLD could be Cognitive Behavioral Therapy to support weight control, as a high BMI is a risk factor for lymphedema, and physical

activity, which is an important factor for breast cancer survival (3).

Patients mostly trust health care professionals, and professionals have a tremendous responsibility to provide the patient with adequate information on treatment and current updates. A lymphedema patient who for decades has been told that CDT, including MLD but avoiding exercise, is the only effective treatment, will for sure need a strong and reliable tutor to guide the patient as new advances and changes in treatment have been realized. And yes, dependency on a lymphedema therapist can also arise using compression therapy and exercise. But all lymphedema treatments need follow-up by therapists in order to maintain a result, so there will always be a certain kind of dependency, which again emphasizes the responsibility of the provider.

A possible road for the patient to find the best individual treatment is to ask for regular and reliable measurements, both quantitative and qualitative. This is also the best road for the therapist to provide the patient with the most beneficial treatment. Regular evaluation can be performed with sophisticated instruments but also with very simple methods like volumetric/circumferential measurements, palpation of thickness in the subcutaneous tissue, and the pitting test. In addition, functional and quality of life measurements are useful.

At the end you plead that we should not discard an effective modality based on limited evidence. Why not turn it around the other way? Why was MLD ever introduced considering the limited evidence? In this discussion we must not forget the very strong evidence for compression treatment, whether it is by garment or by bandaging (2,4,5), and it should always be the first option.

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