

Edema Education and Management Practice Patterns Among OTs Practicing in Hand Therapy: Survey Research

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PURPOSE: Addressing persistent edema is often a priority following an injury as it may delay an individual's ability to resume desired activities due to stiffness, limited motion, or discomfort (Villeco, 2011). In the past 2 decades, there has been a proliferation of knowledge regarding the role of the lymphatic system in edema, the importance of lymphatic stimulation to reduce edema, and the importance of altering treatment based on the type of edema (Rockson, 2009; Vranova & Halin, 2014). However, it is unclear if this information has made it into entry-level therapy education or current hand therapy practice.

DESIGN: Survey research was performed.

METHODS: A 22-question survey related to edema education and practice was vetted and distributed to members of the American Society of Hand Therapists through its Research Division. Demographic data were obtained and examined. Frequencies were examined using ChiSquare and Fisher's Exact tests. Qualitative data were independently open-coded, categorized, and examined for common conceptual categories.

RESULTS: A total of 436 members responded to the survey (92% OT; 6% PT). Most therapists received edema education through on-the-job training and/or continuing education. Physical Therapists (PTs) were more likely to learn the difference between acute/subacute/chronic edema ($p < .01$; 36% PTs, 17% OTs), and the role of the lymphatic system in edema management ($p < .002$; 36% PTs, 14% OTs) in entry-level education compared to Occupational Therapists (OTs). OTs with an MS or OTD, were more likely to learn the difference between acute/subacute/chronic edema ($p < .001$; 23% OTD, 24% MS, 10% BS), and the role of the lymphatic system in edema management ($p < .004$; 19% OTD, 19% MS, 7% BS) in entry-level education compared to BS trained OTs. Duration and feel were common ways therapists assessed and identified differences in edema. Many therapists acknowledged the role of the lymphatic system in edema, but responses lacked specificity.

CONCLUSION: Most OTs practicing in hand therapy reported learning about edema education related to types of edema and lymphatic knowledge through on-the-job training and/or continuing education, although there appears to be a trend that newer therapists with more advanced degrees are learning this information in academic programs. As a profession, it is important academic programs teach the importance of the lymphatic system so future therapists are able to enter practice knowing the best ways to manage clients with edema. It is well documented the lymphatic system plays a crucial role in edema management, especially as edema becomes more chronic in nature (Rockson, 2009; Vranova & Halin, 2014), thus understanding this system and how to stimulate it to effectively reduce higher protein edema is critical for best-practice edema management. OT educators can support bringing this knowledge into academic programs through practicums, case-based learning, and experiential learning opportunities that bridge science to clinical practice. Most OTs practicing in hand therapy rely on subjective measures such as duration and tissue feel when assessing acute, subacute, and chronic edema. Thus, additional research is recommended to identify an objective method of differentiating between acute and chronic edema, so therapists are equipped with the best assessment tools to guide treatment.

IMPACT STATEMENT: These results impact the OT profession as they suggest an area of knowledge that is not well supported in OT academic programs. There is a knowledge translation lag between research and clinical practice (Hanney et al., 2015). Thus, helping to translate this lymphatic knowledge to clinical practice can assist therapists in effectively managing clients with edema.

References

- Hanney, SR., Castle-Clarke, S., Grant, J., Guthrie, S., Henshall, C., Mestre-Ferrandiz, J., Pistollato, M., Pollitt, A., Sussex, J., & Wooding, S. (2015). How long does biomedical research take? Studying the time taken between biomedical and health research and its translation into products, policy, and practice. *Health Research Policy and Systems*, 13, 1-18. doi: [10.1186/1478-4505-13-1](https://doi.org/10.1186/1478-4505-13-1)
- Rockson, SG. (2009). The unique biology of lymphatic edema. *Lymphatic research and biology*, 7(2), 97-100. doi: [10.1089/lrb.2009.7202](https://doi.org/10.1089/lrb.2009.7202).
- Villeco, J. (2012). Edema: A silent but important factor. *Journal of Hand Therapy*, 25(2), 153-161. doi: [10.1016/j.jht.2011.09.008](https://doi.org/10.1016/j.jht.2011.09.008)
- Vranova, M & Halin, C. (2014). Lymphatic Vessels in Inflammation. *Journal of clinical and cellular immunology*, 5(4), 1-11. doi: [10.4172/2155-9899.1000250](https://doi.org/10.4172/2155-9899.1000250)