Impact of climatic variations on lymphoedema - the patient perspective

Author: Susan Witt, Occupational therapist, PhD Student and Research Assistant Flinders University (Australia) and Földi Clinic (Germany)

Introduction: Lymphoedema is a significant problem worldwide and results in substantial burden to both health services and an individuals' quality of life. Higher temperatures and increased humidity have been reported to cause additional discomfort for people diagnosed with lymphoedema, leading to reduced compliance with compression garment use, increased swelling and poorly managed¹. Rising temperature due to climate change is well documented and it is anticipated this will present significant challenges for the ongoing management of lymphoedema².

Aims: The aim of this study was to evaluate the perception of both patients and therapists of the effects of the climate on lymphoedema.

Method: The participants' perceptions were explored through a series of focus groups. Focus group were conducted with small groups of patients (n=12), and with small groups of therapists (n=7). Participants were encouraged to respond to open-ended questions regarding their experiences of managing and working with lymphoedema.

Results: Participants had mixed aetiology of limb lymphedema consisting of five with lower limb lymphoedema, six with upper limb lymphoedema and one with mixed presentation. Five participants had primary lymphoedema and seven participants had secondary lymphoedema. All participants reported increased challenges in humid and warmer weather such as difficulty wearing compression garments, feeling that their limbs were more swollen and requiring additional treatment to bring the oedema back to 'normal'. Challenges were reported to be more evident with a sudden change in temperature such as when going on holiday or during a heat wave. Measures to overcome these challenges included exercise (yoga, Pilates, swimming), dietary considerations, use of flat knit compression garments and water therapy. Whilst therapists acknowledged that patients often report additional challenges, they indicated the difference was not always objectively noticeable. They suggested there may also be behavioural changes in warmer weather, such as less movement or non-compliance with compression therapy that contribute to worsening of symptoms.

Conclusions: Climatic variations have a direct impact on an individual's experience of living with lymphoedema. Warmer temperatures and increased humidity provide the greatest challenges. Alternative treatment modalities are required in order to manage symptoms appropriately.

References:

^{1.} Aberdour, S., & Piller, N. (2015). Climate change, global warming and lymphoedemas. Journal of Lymphoedema, 10(1), 5 2. Witt, S., Watt, B., Gordon, S., & Piller, N. (2021). Climate change and climatic variation impact on chronic oedemas: a systematic review. Journal of Lymphoedema, 16(1), 24-32