Are we there yet?

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We all are aware that there is nothing simple about lymphoedema, its aetiology, co-morbidities, identification, conservative and surgical treatments and patient and carer management and the way in which we all need to team up to get the best outcomes.

The increasing information deluge can make it hard for many of us to decide on what is going on, what to do, when and in what sequence. Despite being well trained and informed, making the right decision is tough. But making the wrong one can mean a poor or sub optimal outcome.

For our front-line therapists and clinicians there are a range of training courses and update options around the world (too many to mention here without possibly missing one of them), giving certification from their respective bodies and the confidence and capability to practice.

However, we are often faced with complex cases, with many confounders, with a poor or undocumented history and/or with the patient presenting in an advanced stage of lymphatic disruption/failure.

We have given you a feeling of that complexity in prior issues of our Journal, most recently the excellent article by Bareham and Speirs (2020) on the Patient perspective and "What about us?" and you will see in this issue a response to this from O'Brien (2021) about the issues and highs and lows of progressing through the cancer diagnosis and treatment pathway and of the fears and trepidations and the surprising highs along it.

But what do you do and where do you seek specific information from and from whom when you are confronted with these cases? The answer to this of course is reputable web sites, peer reviewed studies and systematic reviews along with being a team member and together being able to deliver integrated care, targeting and sequencing treatments.

Its possible that in the future with earlier, objective, and accurate detection of lymphoedemas and improved surgery, targeted radiotherapy and other innovations to minimise damage to our lymphatics, as well as an increasing awareness of the impact of our genetics on their functionality we may not see such late-stage complex cases. However, as you will see in this issue in the articles from Witt, despite this we are facing another significant issue over which we have little control- climate change and its impact on chronic oedema and lymphoedema and its risks and effectiveness of their management.

Its tough getting everything correct. We all do our best but at times our and the international updated knowledge base and guidelines and consensus just can really help but still often only in a general way. We can be left frustrated and powerless, and the patient left thinking about who else they should have seen instead of or in addition to you.

As many of our conferences under the auspices of the ILF and the ISL, BLS NLN, LE&RN and the ALA and other national bodies around the world are showing. We are moving forward knowledge wise and thus in our confidence to better treat our patients as individuals. Our training programs are integrating our new knowledge and our teams are expanding. The question "Are we there Yet?" (a line from a TV commercial in Australia), results in our answer "No, but we are getting there", gaining confidence through increased knowledge, improved objectivity and coordinated team management"

I have picked a few articles from the recent literature to give you some examples of us "getting there" and what we need to do to achieve it.

Firstly, the patient, clinicians, and therapists (in fact the whole team) need to know more about lymphatic dysfunction with a genetic origin and its wide ranging impact . This means having a full genetic history and understanding of what it means. Lymphatic gene dysfunction can affect immune function, leading to enhanced infection risk; it can influence cancer development and spread; and it may even influence fat transport so impacting on nutrition and obesity (Martin-Almedina et al 2021)

Secondly, we need to acknowledge that elevated preoperative body mass index, radiation, axillary dissection, and neoadjuvant medical therapy are associated with an increased risk of lymphedema after breast conserving surgery, but it seems oncoplastic reconstruction is not a risk factor for lymphedema. Maybe the latter surgery which rebuilds the breast after breast cancer surgery, with the aim of reducing scarring and preserving as much of the existing breast tissue as possible is the way to go. (Gowda et al 2020)

In terms of the well documented risk factor of BMI at lymphoedema diagnosis and its link to lymphoedema, it indicates to us the importance of and the need for educational care promoting personalized nutritional lifestyle and encouraging physical activity early in the management of breast cancer. (Leray, et al 2020) and the gain from integrated health management.

The effect of other co-morbidities associated to lymphoedema remains elusive. Morfoisse et al (2021) suggest more information and direction is needed regarding estrogen receptor antagonists or aromatase inhibitors. Further, they indicate, the role of sex hormones and gender has been poorly investigated in the aetiology of the pathology of lymphoedema. We just don't know or are unsure what might be happening in the patient in front of us.

Also increasingly important are investigations which have found a growing list of pathological conditions in which morphological or functional lymphatic changes can be identified. Among them are atherosclerosis and dyslipidaemia, hypertension (and other cardiovascular diseases), inflammation and inflammatory bowel disease, glaucoma, and neurodegenerative disease. Rockson (2021) Rockson also emphasised that the disparate nature of these suggests that the presence (or absence), of the resulting structural /functional lymphatic changes could have a previously unrecognized influence in the maintenance of the patient's health and the promotion/exacerbation of those diseases and of the lymphoedema.

But what of the measurements we make?

What about the objective details of the lymphoedema and of its early detection? We know this is of critical importance as early treatment gives better outcomes. We all are aware that bio-impedance is a potential tool with demonstrated benefits early diagnosis of Lymphoedema and that it can provide an economic benefit in terms of the cost of lymphoedema treatment and great alternative for early diagnosis of (Forte, et al 2021) but it can have its limitations. Keeley (2021) showed limb volume measurements performed better than BIS in the early detection of BCRL and emphasised that pre- and postoperative monitoring of limb volume measurements is useful in the early detection of, and prediction of those likely to develop, BCRL and allow early intervention. Does it matter then how we do it? As long as it's done.

We also must not forget about other early detection strategies such as Tissue Di-electric Constants more about these in our next editorial.

Taken together this and other information particularly the introduction of ICG lymphography and its use in guiding personalized conservative management plans, can be translated into clinical practice and can help us change our research and educational priorities and training programs (Koelmeyer, et al 2021)

All up its clear that we not only have to embrace and apply our new knowledge and incorporate this into our training programs but also, we must work as a team and integrate our treatment and care programs and provide education for those in at risk patient groups as well as for those with lymphoedema. Because we are a relatively tight knit multi-disciplinary community already its well within all our means.

For the patients its knowledge, empowerment, and ability to better self-manage, and our patient groups around the world are making sure this is promoted and supported. (Board 2020).

Are we there yet? Well, no, but we are well along the road to a better outcome for all. Let's listen, learn and apply it all in a multi-disciplinary sense as a team and in concert with our patient needs.

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