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Integrative medicine treatment of lymphatic filariasis

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Key words: lymphatic filariasis; lymphoedema; integrative medicine

Narahari SR, Aggithaya MC, Ryan TJ *et al*. Self-care treatment for lymphoedema of lymphatic filariasis using integrative medicine. *Br J Dermatol* 2023; **190**:94-104.

Lymphatic filariasis (LF) is a parasitic infection, which is spread by mosquito. LF is a common cause of lymphoedema in low- and middle-income countries. In its most extreme form, LF can cause massive lymphoedema, known as filarial elephantiasis. LF is suspected in acquired lymphoedema in filaria endemic areas and commonly presents with lower leg and/or genital swelling for more than 3 months. One of the main complications of the disease is recurrent cellulitis, which can be troublesome to manage and contributes significantly to morbidity. Skin manifestations of LF have been shown to impair, disable and disfigure, and causes stigma, discrimination and socioeconomic problems. The World Health Organization (WHO) global programme to eliminate LF aims to reduce transmission of the disease and improve morbidity from LF through annual mass drug administration and care to reduce complications of the disease.

Treatments available worldwide for LF are limited. In high-income countries surgical management, such as lymphaticovenous anastomosis, is commonly practiced. However, this is not financially feasible in many countries where LF is endemic. The Institute of Applied Dermatology in Kerala, India, developed an integrative medicine treatment for management of LF focusing on low-cost interventions using widely available resources.[1,2] The approach uses a combination of Indian medicine, Ayurveda, combined with yoga, compression, antibiotics and antifungal treatments.

Narahari *et al.*'s recent paper featured here retrospectively assessed the benefits of a community-based integrative medicine treatment for LF. Patients underwent a community programme of treatment and education around lifelong self-care methods to manage LF, provided by nurse counsellors. The self-care methods recommended included skin washing with soap and water, *phanta* soaking, yoga and breathing exercises, before and after Indian manual lymph drainage and compression therapy (Figs. 1- 4). Nurses also advised on antibiotics, antifungals and topical steroid for bacterial entry points. Many of the interventions employed aimed to improve skin integrity and in turn reduce the risk of cellulitis and the associated morbidity. However, patients also had focus group discussions around help to improve quality of life, especially focusing on social isolation. After the 2-week intensive phase of in-person sessions, the nurses gave virtual follow up every 2 weeks to improve adherence to self-care techniques.

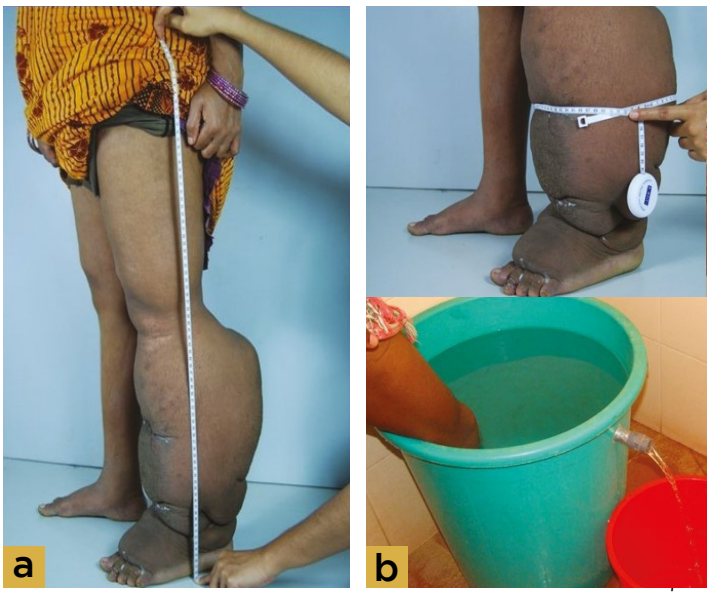

Fig 1. (a) Girth measurement of lymphoedematous leg using a measuring tape; (b) measurement of volume of limb using water displacement method ('gold' standard in lymphology). (Courtesy of Prof. T. Ryan).

Limb volume was assessed with the volume displacement technique and circumference measurement. Limb volume was reduced by a mean of 24.5% during the intensive phase. Bacterial entry points such as ulcers, excoriations, eczema and intertrigo were found to be associated with cellulitis and increased limb volume. The integrative medicine approach dramatically reduced the incidence of the bacterial entry points and cellulitis, and improved quality of life.

The reduction of limb volume in subsequent follow-up was minimal compared with the intensive phase; 2.3% between the first and second follow-up. Furthermore, there was a significant difference in limb volume between those with good and poor adherence to self-care measures. These findings

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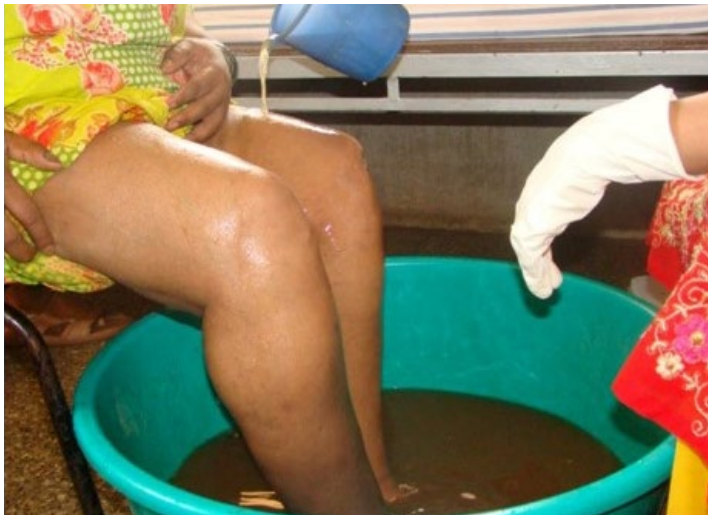

PHANTA SOAKING	
CHURNA	**DOSHA**
Yastimadhu (*Glyceriza glabra*)	Kapha
Manjista (*Rubia cordifolia*)	Vata
Sariva	Pitta

Fig 2. Soaking with herbal solution (Phanta soaks). (Courtesy of Prof. T. Ryan).

emphasize the importance of counselling to improve patient engagement and adherence to self-care measures.

The authors found that the direct cost of the therapy was dependent on limb size and ranged from US$75.10 to US$110.70 for the intensive phase. However, they were unable to calculate indirect costs for the patients, which may have contributed to the wide variability in length of follow-up.

This study demonstrated that this integrative medicine approach is an effective, low-cost way of managing LF.

Fig 3. Checking for bacteria entry points. (Courtesy of Prof. T. Ryan).

Interventions to improve adherence to self-care techniques are likely to be the key to this approach having long-lasting results. If the approach can be integrated into healthcare settings in endemic areas, we can hope to move closer to achieving the WHO global programme aim of reducing morbidity related to LF worldwide. The benefits of this approach may be extended to other causes of tropical lymphoedema such as leprosy and podoconiosis if they are included in neglected tropical disease programmes that provide integrated morbidity management.

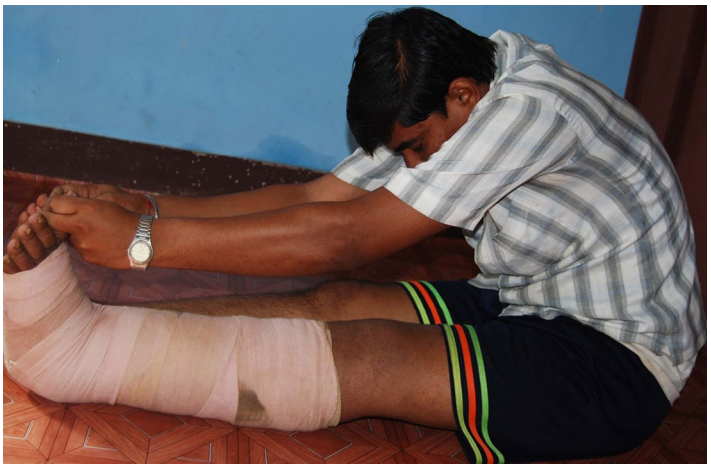

Fig. 4. Patient with compression bandaging performing yoga exercises. (Courtesy of Prof. T. Ryan).

References

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