

# Leg Club update

## Caring for chronic oedema at a community Leg Club

Chronic oedema is a poorly recognised but common problem with more than 100,000 sufferers in the UK alone (Moffatt, et al, 2003). Moffatt et al (2003) indicate that both lymphoedema and chronic oedema are more common than initially realised and suggest that the problem is as common as leg ulceration. Chronic oedema presents huge management challenges, particularly for the community nurse. For nurses to offer effective treatment it is important to understand why chronic oedema develops. The causes are diverse but can be loosely categorised into four common categories:

- ▶▶ Lymphoedema
- ▶▶ Lymphovenous oedema
- ▶▶ Cardiac oedema
- ▶▶ Dependency oedema.

Mablethorpe and Sutton-on-Sea Leg Club is held in a socially deprived area, which has a high level of people over 60, so proportionally there are a high number of leg problems and long-term debilitating illnesses. This Leg Club has now been running for nearly four years. There are more than 700 members and on average 40–50 members come to the Club each week. Not all of these members have leg ulcers, as we have integrated well-leg regimen members who can drop in for advice. Chronic oedema and lymphoedema have been more prevalent over the past two years and we have encountered an increase in members attending on a frequent basis.

Until recently, little guidance has been available for professionals treating patients with varying degrees of chronic oedema (Lymphoedema Framework, 2006). Community nurses can be the first point of contact for the patient and play a pivotal role in enhancing opportunities for prevention, early treatment and specialist referral. Our community nursing team needed to embrace this new problem. As one of the lead nurses in our Leg Club, the challenges of chronic oedema and

lymphoedema inspired me to undertake further specialist training with Glasgow University.

Our local area has a deficit in the care provision for patients who have lymphoedema unrelated to cancer treatment which has led to an inequality of care. Many patients attending our Leg Club have varying degrees of chronic oedema, giving us a number of challenges. Since undertaking the Diploma in Lymphoedema Management, I feel the enhanced knowledge and skills I have gained and disseminated have enabled our Leg Club team to provide an improved level of evidence-based care to our local community. Skin care, exercises and compression therapy are familiar to community nurses, however, the use of compression therapy for chronic oedema and lymphoedema is different from that for chronic venous disease. However, we have been able to incorporate this into our care.

All members who attend the Leg Club receive a full holistic and vascular assessment. A management decision will be made following diagnosis and once treatment has started a regular reassessment of the patient with re-evaluation of the treatment plan will be implemented, adapting it in response to the patient's condition. Concordance is maintained throughout their care, helped by members feeling that they have open access to the Leg Club and can be seen without appointments. The important goal for members with chronic oedema and lymphoedema is the promotion of self-management and long-term control of their condition, with support, education, training and supervision from the multidisciplinary team (Lymphoedema Framework, 2006).

The comprehensive documentation used within Leg Clubs nationally ensures that all staff are working to the same standard of clinical excellence (Lindsay, 2004). It includes identifying chronic oedema and lymphoedema using the

Stemmer's sign test (*Figure 1*). This involves pinching the skin folds on the upper surface of the second toe or finger. If this skin cannot be lifted, this is a positive test result that could indicate the presence of lymphoedema. However, a negative Stemmer's sign does not exclude lymphoedema.

When treating patients with chronic oedema one of the key elements of management is the application of compression using either multilayer inelastic bandages or hosiery. While there are no specific guidelines relating to vascular assessment in patients with chronic oedema, national guidelines recommend that vascular assessment is carried out as part of a holistic assessment to exclude arterial disease before commencing compression therapy (Clinical Resource Efficiency Support Team [CREST], 1998; Royal College of Nursing [RCN], 1998; Scottish Intercollegiate Guidelines Network [SIGN], 1998). Multilayer inelastic bandaging is indicated for the treatment of patients with:

- ▶▶ Ankle brachial pressure index (ABPI) >0.8 or <1.2
- ▶▶ Damaged or ulcerated skin
- ▶▶ Shape distortion of the limb
- ▶▶ Areas of fibrosis or thickened skin
- ▶▶ Enhanced skin folds
- ▶▶ Presence of lymphorrhoea
- ▶▶ Limbs that do not fit into compression garments.

Our members with active leg ulcers or chronic oedema with lymphorrhoea have their vascular status reassessed at three-monthly intervals. Regular reviews of 'well legs' are undertaken once treatment has been completed, and annual vascular assessments are undertaken to ensure that there is no relapse in their condition. The aim of bandaging to treat chronic oedema is to reduce swelling, restore any distortion in the limb shape, improve the skin's condition and enhance the patient's quality of life. Bandaging for chronic oedema predominantly uses layers of

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short-stretch bandages applied in a graduated pressure profile over a layer of tubular retention bandage, with ample padding and along the full extent of the limb (European Wound Management Association [EWMA], 2005). Inelastic short-stretch bandages are used to deliver compression in the majority of cases because they have the ability to provide a rigid casing around the limb. They have a low amount of extensibility, resulting in a greater variation between working and resting pressures which enhances the function of the veins and lymphatics (Partsch, 2003).

The aim is to encourage fluid to move proximally up to the root of the limb and correct limb distortion. Individuals with poorly healing leg ulceration will also benefit from this bandaging technique. Healing will usually occur once the oedema has been resolved.

Toe bandaging has also been taught within the team to prevent oedema being pushed into the digits. Using a 4cm conforming bandage, toe bandaging is applied before the application of the multilayer short-stretch bandages. The bandage should be anchored around the foot, starting laterally and then taken across the dorsum of the foot to the great toe. Starting distally the toe should be evenly bandaged using several layers. The bandage should then be taken back across the dorsum and under the sole of the foot, repeating each step to cover each toe. Once multilayer inelastic bandaging has been used to reduce limb volume, compression hosiery can be used to maintain the reduction. Chronic oedema is a life-long condition and successful control for the patient needs continual skin care, an exercise programme and containment using compression hosiery. The majority of patients with no evidence of shape distortion will be able to fit into circular knit European class hosiery. Patients with evidence of skin folds and shape distortion will need compression



**Figure 1. Testing for Stemmer's sign (positive right and negative left hand). Photograph reproduced by kind permission of Christine Moffatt.**

garments that sit on the skin's surface and do not enter the skin fold or creases causing a tourniquet effect. Therefore, we need to consider the construction of the fabric and stiffness index of the garment. Measuring for custom-made flat knit compression garments (some are available on drug tariff) would be the choice for these patients.

Many patients presenting with chronic oedema can be successfully managed in community settings by the district nursing service. Through comprehensive assessment patients at risk can be identified and diagnosis determined. The patient's care needs should be structured and ongoing, ensuring correct procedures and principles are followed and referring to local guidelines, policies and protocols.

Practitioners undertaking treatment of patients with chronic oedema of the lower limbs should do so while engaging with the multidisciplinary team and should promptly seek the opinions of other specialist practitioners as required. **WUK**

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## References

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