



Applying compression therapy to treat chronic venous leg ulcers

Why is this important?

Leg ulcers are a chronic, recurring condition affecting two per cent of the population during the course of their lives [1]. The number of people affected increases significantly with age. Because of the recurring nature of leg ulcers, the average age at first onset is 65 years while the average age of people affected at any one point in time is 75 years [2].

Ulcers are a significant health problem as they can cause severe pain [3] and immobility. They can discharge, develop an odour, and can have psychological as well as physical effects on sufferers.

While leg ulcers can be caused by factors such as arterial disease, diabetes, skin cancers and trauma, most are caused by problems with venous blood flow. These chronic venous leg ulcers are due to impaired function of the venous valves but it is not known how poor vein circulation triggers a leg ulcer. Many

patients with chronic venous leg ulcers have a previous history of deep vein thrombosis, which predisposes them to this condition [4].

Best available evidence

Treatment options differ according to whether an ulcer is caused by venous, arterial or malignant disease. Therefore, establishing a cause for the ulcer is critical. Best evidence from several international clinical practice guidelines suggests that the patient's ankle-brachial pressure index be measured (using a hand held Doppler device) before commencing treatment [5–7].

For the treatment of chronic venous leg ulcers, there is clear evidence from a Cochrane systematic review that compression therapy is the most effective therapy [8]. Compression therapy consists of specialised bandaging applied by appropriately trained health professionals followed by long-term use of

compression stockings. This increases ulcer healing better than non-compression therapies [8].

Current practice

Unfortunately, leg ulcers are commonly treated without a diagnosis of ulcer type having first been established. A population-based audit conducted in 1995 found that over half (52 per cent) of the patients studied underwent no formal diagnosis [9]. At the beginning of the study, only 19 per cent of patients who should have been receiving compression therapy were in fact doing so [9].

An audit of 136 patients presenting with leg ulcers to a vascular surgeon between 1996 and 2000 found that none had had adequate compression therapy prior to referral. The average duration of ulcer history in these patients was six years [10].

One large Australian study found that only 19 per cent of patients who should have been receiving compression therapy were in fact doing so.

A survey of 371 surgeons reported that 99 per cent of vascular surgeons used compression therapy compared to 61 per cent of general surgeons in the management of venous leg ulcers [1].

Implications

- Leg ulcers often recur requiring long-term preventive treatment strategies. They can have profound impacts on quality of life, commonly causing pain, disrupted sleep, immobility and social isolation brought about by interference to normal activities of daily living.
- Diagnosis is critical because the treatment of different ulcer types varies and incorrect treatment (such as applying compression bandages to arterial ulcers) will delay healing and can lead to significant damage, sometimes resulting in otherwise avoidable amputations.
- Patients should ask their clinician to tell them the diagnosis of cause before treatment

starts, and ask if the treatment is appropriate for the cause.

- Compression therapy requires specialised training and must be tailored to individual patients and their circumstances.
- As leg ulcers predominantly affect older people, with an ageing population the number of people experiencing leg ulcers is projected to double over the next 25 years [2].

References

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