

An audit of the use of compression hosiery kits as first line treatment of patients with leg ulceration in leg ulcer clinics

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Introduction

The management of patients with leg ulceration is a growing problem for the NHS, both in terms of cost to the service and the impact on the patient Guest et al (2017).

The complex nature of leg ulcers combined with underlying disease processes has often meant that treatment is not simple, can be time consuming and many patients may take a long time to heal.

Compression bandaging has been the main treatment option for patients with venous leg ulceration, however, there is a growing body of evidence to suggest that using compression hosiery kits as first line therapy can help to heal leg ulcers and reduce recurrence rates.

A study by Ashby et al (2014) demonstrated equal healing rates when comparing compression hosiery kits with four layer bandaging, in addition this study showed reduce ulcer recurrence in the hosiery kit group.

The recent best practice statement for the management of venous leg ulceration also promotes the use of compression hosiery kits as first line therapy for appropriate patients (Wounds UK 2016).

Method

In our clinics, hosiery kits were used only when ulcers were healing as a step down and prior to commencing maintenance hosiery. In an effort to reduce waiting times it was decided to increase the number of patients using hosiery kits as first line treatment for their leg ulcer.

A pre-audit of 20 patients was carried out to establish a baseline prior to implementing the change in practice. Those patients who were suitable were placed into hosiery kits.

A further group of 19 patients were included in the post implementation audit, once the use of hosiery kits were established for a larger number of patients.

Full holistic assessment of all patients was carried out, and those deemed suitable for hosiery kits had these applied instead of bandaging. Training for the local district nurse teams and practice nurses was also undertaken to ensure continuity of care.

References

Ashby RL, Gabe R, Ali S, Adderley U (2014) Clinical and cost-effectiveness of compression hosiery versus compression bandages in treatment of venous leg ulcers (Venous leg Ulcer Study IV, VenUS IV): A randomised controlled trial. *Lancet* 383(9920): 871-9
Guest JF, Vowden K and Vowden P (2017) The health economic burden that acute and chronic wounds impose on an average clinical commissioning group/health board in the UK, *Journal of Wound Care*, Vol 26 number 6 pp292-303
Wounds UK.(2016) Best Practice Statement: Holistic management of venous leg ulceration. London: Wounds UK.

Results and discussion

In the pre audit, only 3 patients were deemed suitable for hosiery kits, however, following the new protocol, 7 patients were placed into hosiery kits following initial assessment. A total of 10 patients achieved healing during the pre-audit phase, and this included all hosiery kit patients.

The average healing time in the pre audit averaged at 55 days for the 10 patients where healing was achieved. 11 patients in the post-audit were recorded as healed and the average healing time was 29 days, (this included one patient in short stretch who took 102 days to heal).

The post implementation audit demonstrated that patients who were placed into hosiery kits had 17% shorter waiting times for referrals from 29 days down to 25 days.

The number of clinic visits also reduced following the use of hosiery kits, with some patients being followed up by practice nurses, this helped to free up clinic time for new patients.

There have been benefits both for staff, the service and for patients using the service. As we strive to encourage more self-care solutions and reduce patient dependency, the use of hosiery kits can be empowering for patients. Patients were pleased not to be in bandages and were able to put on their own shoes, therefore helping to raise their self-esteem and at the same time improve their mobility.

Hosiery Kits Benefits

- Ease of use
- Patient safety
- Encourages self-care
- Less restrictive, able to wear shoes
- Reduced training issues
- Consistent compression values
- Cost benefits
- Less clinic visits
- Improved concordance
- Reduced re-occurrence

Conclusion

By following the treatment algorithm discussed in the Venous Leg Ulcer Best Practice Statement (Wounds UK 2016) this has allowed our clinic to treat a greater number of patients with a simpler system, requiring less nurse time, clinic visits and improve outcomes.

The improvements in outcomes have more than justified the benefits of compression hosiery kits as a first line treatment and not a step down product.