

The Successful Management of a Venous Leg Ulcer using a Combination of an Enzyme Alginogel and Compression Therapy

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Introduction

A venous leg ulcer (VLU) occurs in the presence of venous disease and is defined as a break in the skin below the knee, which has failed to heal within 2 weeks. This classification of ulcer can be caused by structural or functional venous disease and is a condition that affects the return of blood flow from the lower limb to the heart, commonly due to failure within the valves or veins. Those affected by VLUs can present with recurring cycles of ulceration, therefore, timely assessment, accurate diagnosis and effective management is paramount⁽¹⁾.

It is paramount that a full holistic assessment is undertaken, focussing on lifestyle, overall health factors with the inclusion of any underlying causes or relevant medical and family history. The patient is the main stakeholder and ensuring that their individual needs are considered play a central role in the assessment and will support self-management, understanding and engagement in the treatment. Additionally, pain management is key as it can affect quality of life⁽²⁾. An ankle brachial pressure index (ABPI) assessment should form the basis of treatment and will determine the management plan. This assessment is not intended to diagnose venous disease, but rather to exclude significant arterial disease to ensure the safe use of compression bandage, which is deemed as the gold standard approach, can be undertaken⁽¹⁾.

This case study illustrates the management of a 72-year-old male with a medical history of diabetes, hypertension, inflammatory bowel disease and has a body mass index indicator of being morbidly obese. The patient manages to mobilise with walking aids. He suffers with recurrent leg ulcers, originating from a trauma wound, and following the completion of venous studies he was diagnosed with venous insufficiency. The venous ulcer condition was initially managed by a Practice Nurse but due to deterioration and failure to heal, a referral to the leg ulcer service was completed.

Method

The patient was reviewed by the Clinical Nurse Specialist in the leg ulcer clinic six weeks post onset. Previous management included the use of an antibacterial irrigation solution, an antimicrobial hydrofibre (silver) and class 2 compression hosiery with dressing changes performed three times per week. The Clinical Nurse Specialist's aims were to reduce the risk of infection, manage exudate and malodour and support pain management through appropriate dressing selection. The patient attended clinic for assessment and dressing changes.

The patient was commenced on an Enzyme Alginogel, Flaminal® Forte primary dressing with a secondary absorbent non adherent. Compression bandage therapy was also initiated, and dressing changes continued three times per week.

Result

A significant improvement of the ulceration was noted following the introduction of Flaminal Forte primary dressing. The patient expressed a drastic decrease in the previously experienced pain, as Flaminal® appeared to offer a soothing effect, there was also a noted decrease in odour. Exudate management was achieved and there were no infection interruptions with a noted improvement in the patient's quality of life.

Discussion

Overall, only half of all people with VLUs heal within 12 months, despite best evidence suggesting a mean time to healing of 3 months. VLUs also have a significant impact on patients' quality of life, with associated personal, social, and psychological effects; this has a considerable financial impact on healthcare providers, as well as a wider social and economic impact. The mean NHS cost of wound care over 12 months is estimated to be £7,600 per patient with a VLU. However, the cost of managing an unhealed VLU is 4.5 times more than that of managing a healed VLU (£3,000 per healed VLU and £13,500 per unhealed VLU⁽³⁾).

Conclusion

Chronic leg ulceration can persist for several years, and appropriate evidence-based management is vital in order to support the best clinical outcome.

This case study demonstrates an effective, evidence-based approach for the management of venous leg ulceration. It also validates the clinical effectiveness of Flaminal® Forte to achieve the treatment aims of exudate management, infection prevention, pain reduction and with the overall outcome of the continued improvement of a previous non-healing venous ulcer. It also validates Flaminal®'s suitability to be used in conjunction with compression bandage therapy. As a result, an uninterrupted wound healing continuum was achieved.

References

1. Wounds UK (2022) Best Practice Statement; Holistic Management of Venous Leg Ulceration 2nd Edition. <https://wounds-uk.com/wp-content/uploads/2023/02>
2. Wounds UK (2021) Best Practice Statement: Addressing skin tone bias in wound care: assessing signs and symptoms in people with dark skin tones. Wounds UK, London. Available at: www.wounds-uk.com
3. Guest JF, Fuller GW, Vowden P (2018) Venous leg ulcer management in clinical practice in the UK: costs and outcomes. *International Wound Journal* 15(1): 29-37 <https://wounds-uk.com/wp-content/uploads/2023/02>



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