

The Successful Management of a Venous Leg Ulcer Using an Enzyme Alginogel®

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Introduction

A venous leg ulcer (VLU) is defined as a break in the skin below the knee that occurs as a result of venous disease and which has failed to heal within two weeks⁽¹⁾.

Venous leg ulcers often reoccur in repeated cycles; therefore, timely assessment, accurate diagnosis and effective management is vital to achieve the best patient outcomes.

VLU's is the most common type of leg ulcer and it is estimated that 1 in 50 people over the age of 80 has one. The risk increases in individuals with poor mobility and who have previously had a deep vein thrombosis. They can develop after a minor injury, if persistently high pressure in the veins has weakened the skin⁽²⁾.

The key component of management for patients with venous leg ulcers is a holistic assessment including an arterial doppler to establish the ulcer aetiology, followed by the introduction of compression bandage therapy based on the ankle brachial pressure index outcome⁽³⁾.

Case Study

This case study involves an 84-year-old female who had a medical history of chronic obstructive pulmonary disease, osteoarthritis, type 2 diabetes and hypertension. The patient sustained a skin laceration injury to the posterior aspect of the left lower leg and was initially managed by the GP Practice Nurse. Due to a deterioration of the wound and increasing pain, she became housebound and was referred to the community district nursing team and subsequently to the Tissue Viability Specialist Nurse approximately 6 months post injury.

The assessment process was completed by the Tissue Viability Nurse and concluded that the leg ulcer measured 8cm width x 9cm length x 0.3cm depth. The ulcer bed was 80% granulation tissue and 20% slough and there was moderate amounts of serous exudate. There were no obvious signs of infection, although the patient had experienced increasing pain. The patient had recently completed a course of Flucloxacilin antibiotics and despite previous treatment, the ulcer was failing to heal.

Method

The Tissue Viability Specialist Nurse's aim was to promote wound healing with the debridement of devitalised tissue, reduce the risk of infection, manage wound exudate and support pain management, which clearly was affecting the patients quality of life and imposing social isolation.

An enzyme alginogel® primary dressing, Flaminal® Forte, was selected for its evidenced antimicrobial protection properties and its debridement ability, as devitalised tissue creates a feeding ground for bacteria and is proven to delay wound healing. Flaminal® Forte has a higher concentration of alginate than its sister product, Flaminal® Hydro, and is recommended for moderate to high exuding wounds. Finally, there is substantial clinical evidence to support its recognised soothing ability in the management of painful wounds. A non-adherent dressing was applied to reduce the risk of trauma at dressing changes and a secondary superabsorbent non-adherent pad. The patient was commenced on full compression bandages, following an arterial doppler assessment to ensure suitability. Dressing changes were performed twice weekly in the patient's home.

Results

Four weeks into the treatment with Flaminal® Forte and compression bandaging, the exudate levels had reduced, the ulcer continued to be infection free and there was a noted reduction in the ulcer size and depth. The pain previously experienced by the patient had diminished. The patients leg ulcer continued to improve during the treatment period and after 6 months the ulcer measured 0.5cm x 0.5cm. At this stage compression hosiery was introduced and the primary dressing of Flaminal® continued; this management plan enabled the patient to travel abroad for two months where she was self-caring with her wound care.

Discussion

There is a huge variation in healing times of venous leg ulceration and it has been documented that overall only half of all people will heal within 12 months. Therefore, timely assessment, accurate diagnosis and effective management is fundamental in order to improve patient outcomes⁽³⁾.

Conclusion

This case study demonstrate an effective, evidence based approach to the management of chronic leg ulcers which encompasses an holistic approach to care. The principles of wound bed preparation have been implemented, enhancing the healing trajectory and improving the patients quality of life. It also emphasises the clinical effectiveness of Flaminal® Forte to achieve the treatment aims of exudate management, infection prevention, pain reduction with the outcome of wound healing. It also validates its suitability to be used in conjunction with compression bandage therapy in the management of venous leg ulcers and subsequently, facilitating patient autonomy by supporting self-management.

References

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23rd Jan 2023



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