

2023

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Keaveney, Charlotte

Keaveney, C. (2023). 'Using evidenced-based practice to save community nurses time for lower leg salvage through wound debridement: a case study', South West Clinical School Journal, 3 (3).

<https://pearl.plymouth.ac.uk/handle/10026.1/21399>

<https://doi.org/10.24382/yjy9-wf02>

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#400WORDS: CASE STUDY

Using evidenced-based practice to save community nurses time for lower leg salvage through wound debridement: a case study

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Submitted for publication: 11 September 2023

Accepted for publication: 11 September 2023

Published: 29 September 2023

Introduction

In February 2021, a patient was referred to the community nursing team with extensive leg ulceration and vascular deficiency, following chemotherapy. The patient was not previously known to community nursing services. There was a significant amount of community nursing time required to provide this patient with the support they required to heal the wound.

The wound was considered a 'hard-to-heal wound', which, within the community setting accounts for 66% of the wounds treated (Guest *et al.*, 2015). A significant proportion of the time community nurses use is treating hard-to-heal wounds involves debridement of devitalised tissue (Hodgson *et al.*, 2017). Reviewing the evidence base, researchers recommend debridement through use of hydro-responsive wound dressing (HRWD) for a wound of this nature, especially within a community setting (Butters *et al.*, 2023).

Case study report

A multidisciplinary approach was used for assessment. It was decided that a HRWD would be used and covered with superabsorbent dressing to manage high-levels of exudate and then secured in place with toe-to-knee bandaging with spiral compression bandages, applied at 10mmHg pressure. Daily visits were initially required however, within one week, dressing changes reduced to three-times a week due to reduction in levels of exudate. Over the course of 16 weeks the level of devitalised tissue reduced significantly (see Appendix 1). The use of HRWD continued until healing was achieved.

Discussion

The demands on the community nursing services due to increased complexity of patient care is recognised by the Queens Nurse Institute (2019). Using evidence-based practice for wound care such as this allows for better caseload management for all patients including improved patient outcomes for wound care (Adderley, 2023).

Ousey *et al.* (2021) discusses the importance of wound bed preparation, and a dressing which promotes a moist environment, encourages healing through autolytic debridement and cleansing, whilst balancing exudate levels and moisture. Butters *et al.* (2023) discusses the added benefit of Ringer's Solution in HRWD to reduce pain in both the wearing of dressings and the pain experienced on dressings changes.

Conclusion

Using evidence-based practice this case study, not only shows significant patient benefit, but the consequential effect for the community nursing service is time saved and improving outcomes for more patients. Using HRWD on a lower limb that was at high-risk of being amputated, was effective within a short time frame to debride, reduce pain, promote healing and improve quality of life.

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Appendix 1: series of wound healing pictures using a hydro-responsive wound dressing.



07.05.2021 (week -1)



31.05.2021 (week +2)



07.05.2021 (week +2)



21.06.2021 (week +6)



09.07.2021 (week +8)



13.08.2021 (week +11)



15.09.2021 (week +16)

Photographs published and shared with the patient's consent.