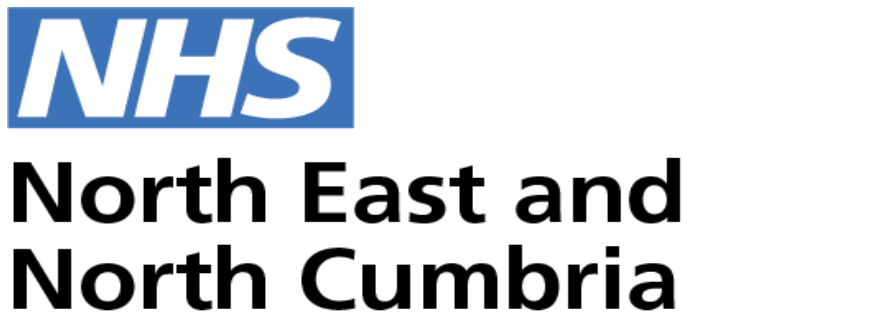


Implementation of systematic odour assessment and a Cinnamon-Based Odour-Controlling Dressing to enhance Quality of Care in Patients with chronic lower limb wounds

Jane Todhunter, Vascular Nurse Practitioner, North Cumbria Integrated Care NHS Foundation Trust, UK, Jane.Todhunter@ncic.nhs.uk
Helen Greenhow, Vascular Nurse Specialist, North Cumbria Integrated Care NHS Foundation Trust, UK



Background

“How do you describe the odour from your wound?” For many patients with chronic wounds, this question highlights a source of profound physical and emotional distress. Malodour from chronic wounds not only disrupts patients’ quality of life but also places a burden on healthcare systems attempting to manage its effects (Maida et al., 2009). Even though it has been acknowledged that wound odour is the most distressing of wound symptoms. Gethin et al. 2014 documented that 88% of clinicians do not assess for wound odour.

There are limited commercial solutions available for managing wound odour effectively and quickly, with charcoal dressings being a common choice. Wound odour is frequently an assessment made by the clinician, using assessment scales that do not account for the patients’ feedback (Akhmetova et al., 2016; Gethin et al., 2023). This case series aimed to develop the subjective assessment of wound odour in vascular patients with lower limb wounds using patient directed questions. A new cinnamon-based secondary dressing* was evaluated as part of the service improvement initiative aimed at improving patient-centred care by controlling wound odour from the moment a patient reported it as a problem.

Methodology

Six patients (ages 31–81+, four females, two males), with chronic lower limb wounds associated with arterial (33%) or venous (50%) or mixed aetiology (17%) insufficiency participated in a maximum 14-day evaluation.

The cinnamon dressing was applied over primary dressings selected by a nurse specialist and based on the requirements of the wound. Examples of wounds are presented in Figure 2.

Wound odour levels were recorded at baseline (day 0), on day 1, and at final assessment. Patient-reported impacts regarding odour awareness, social embarrassment, and lifestyle were also evaluated (Table 1).

Are you aware of the odour?
Are you concerned that other people will notice it?
Are you upset by the reaction of others?
Do you feel embarrassed?
Does this affect your work environment?
Does it affect your lifestyle and social interactions?
How do you describe the odour from your wound?

Table 1 – Patient Reported Experience Measures

Results

At baseline, patients described the odour as “bad flesh / decay”, “rank” or “worst sort of cabbage, rotten”. All patients reported varying degrees of distress related to wound odour (Figure 1), with 67% of patients describing embarrassment and 50% reporting an impact on social interactions. Results showed that 4 out of 6 patients directly reported embarrassment (Patients 1, 3, 5, 6). In patient 4, the nursing staff noted odour affected other patients, but the patient did not self-report embarrassment.

Odour was controlled effectively across all cases, with significant reductions noted as early as Day 1. At the final assessment, patients’ awareness of the wound odour was evaluated to be between mild or none.

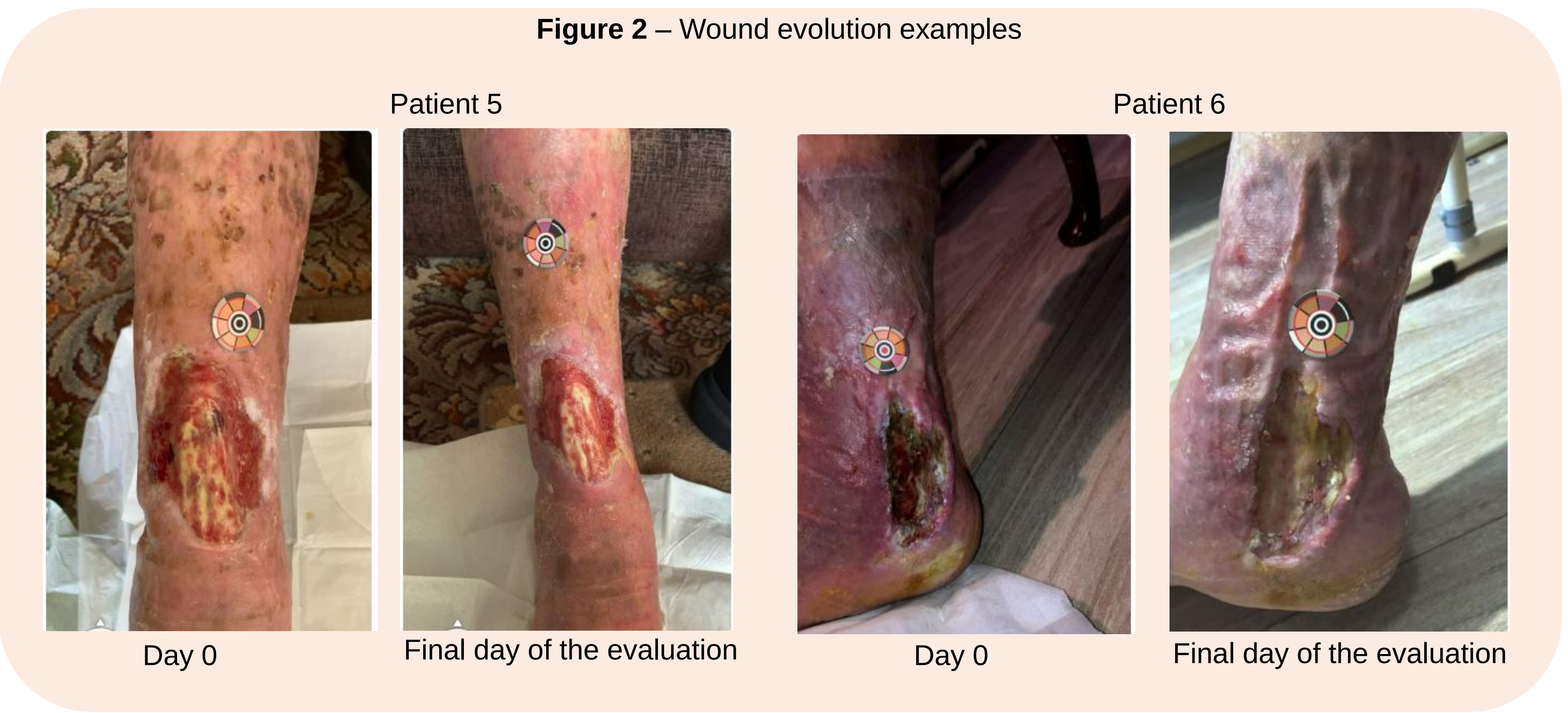
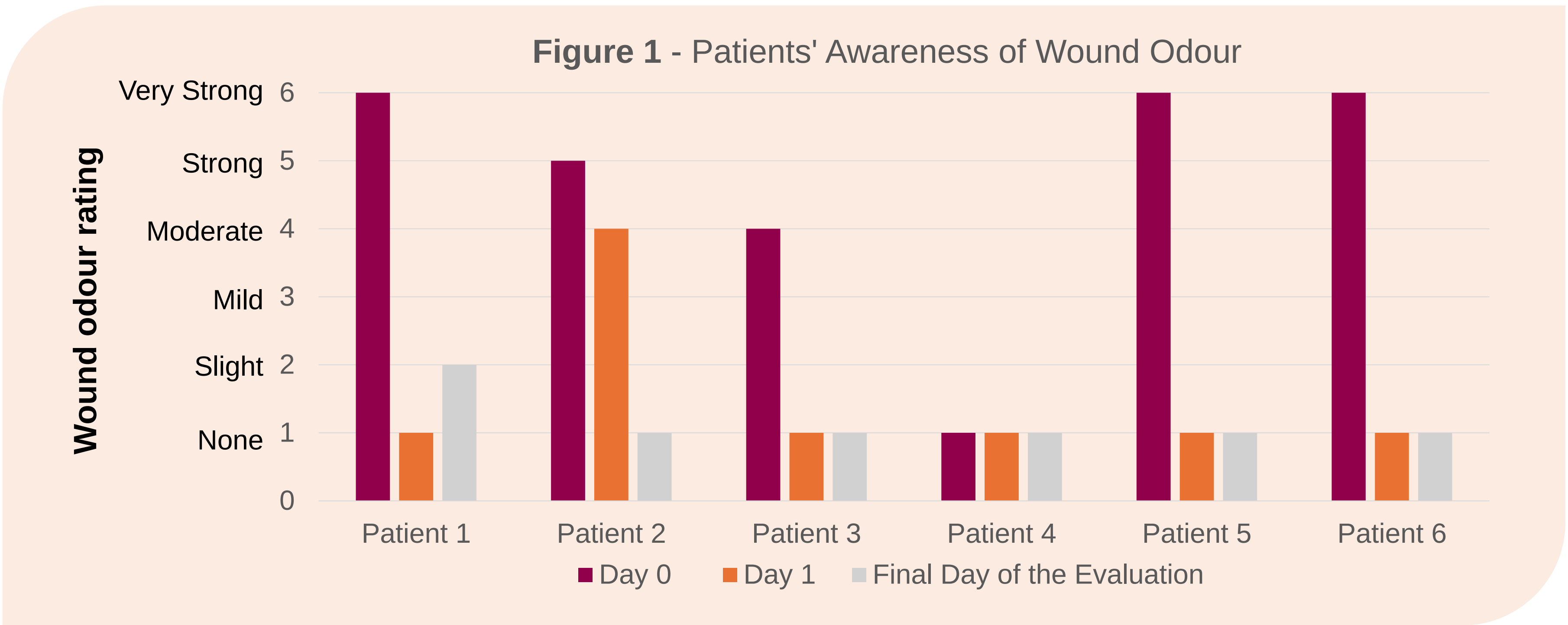
Odour control was shown to improve patients’ feelings of dignity and confidence. Patients experiencing embarrassment and social isolation reported renewed engagement in public and social settings.

Healthcare professionals noted that the integration of Cinesteam® was simple to incorporate into practice with established wound care protocols, ensuring a consistent, patient-centred approach to care delivery.

Conclusion

The implementation of a more systematic odour assessment alongside the use of the cinnamon-odour control dressing for the six cases evaluated in this study, influenced outcomes positively including patients reporting increased wellbeing. This case series may demonstrate the need for more standardised practices that validate patient concerns about wound malodour and support patient-centred care.

By reducing psychological distress and enabling social reintegration, an approach to assessing wound odour more comprehensively and acting on the findings immediately may address an important need in chronic wound management.



Patient Feedback

Patient 1 (Female, 41–60 years), who initially avoided university seminars due to embarrassment, resumed social activities after Cinesteam application.

Patient 5 (Female, 31–40 years) initially described the odour of her wound as "rank," but later compared the scent of Cinesteam to "Christmas on her leg".

References
Akhmetova A, Saliev T, Allan IU, Illsley MJ, Nurgozhin T, Mikhailovsky S. A Comprehensive Review of Topical Odor-Controlling Treatment Options for Chronic Wounds. J Wound Ostomy Continence Nurs. 2016;43(6):598-609.
Maida V, Ennis M, Kuziemyk C, Trozzolo L. Symptoms associated with malignant wounds: a prospective case series. J Pain Symptom Manage. 2009;37(2):206-211.
Gethin G, Grocott P, Probst S, Clarke E. Current practice in the management of wound odour: an international survey. Int J Nurs Stud. 2014;51(6):865-874.
Gethin G, Murphy L, Sezgin D, Carr PJ, McIntosh C, Probst S. Resigning oneself to a life of wound-related odour - A thematic analysis of patient experiences. J Tissue Viability. 2023;32(4):460-464.