

A novel odour controlling dressing for the management of a complex fungating breast wound



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Introduction

Breast cancer is the most common cancer in the UK accounting for 15% of all new cancers, with approximately one in seven women being diagnosed with breast cancer in their lifetime. Approximately 55,900 new breast cancer cases are diagnosed each year in the UK, meaning more than 150 each day (Cancer Research, UK, 2019). Malignant fungating wounds in women with breast cancer occur when an underlying localised tumour infiltrates the skin, blood capillaries and lymph vessels. The prevalence of fungating wounds is estimated to be between 5 and 10%, although the exact figure is not known as population-based registries do not collect these data (Adderley & Holt, 2014).

This case study discusses the management of 83-year-old Brenda (pseudonym) who was referred for advice to the tissue viability nurse (TVN), with a 9-month history of a fungating and malodorous breast tumour. Brenda was under the care of the District Nurses (DNs) as she had limited mobility; the DNs had tried several dressing regimens to try to contain the odour and exudate often associated with fungating lesions. Malodour in wounds can be caused by volatile organic compounds, metabolic end products and bacteria.

Malignant wounds are complex and can be very challenging for both health care professionals and the patients due to the myriad of associated symptoms such as leakage, malodour and pain. Malodour from malignant wounds can be extremely distressing for the patient, compared with other symptoms, and often leads to social isolation (Lo et al, 2012).

Method

On review by Tissue Viability, the wound measured 14cm x 6cm with 80% slough and 20% granulation tissue; there was a strong malodour and high levels of exudate which caused Brenda undue distress. Previously the DNs had used a hydrofibre dressing as well as alginate to manage the exudate and activated charcoal to reduce the malodour. The TVN prescribed a hydrofibre dressing with silver and a cinnamon odour controlling dressings for the DNs to apply as a secondary dressing. The dressings were to be changed daily due to high levels of exudate.



Cancerous malodorous wound, courtesy of Isabelle Fromantin (Wound & Healing Specialist Nurse)

Upper protective layer Sachet filled with cinnamon powder Layer in contact with primary dressing

Results

After one week of using the cinnamon dressing, Brenda reported an improvement in the exudate level, and particularly the malodour. She also liked the cinnamon fragrance from the dressing and she appeared to be a lot more positive as she no longer felt embarrassed by the odour from her wound. Due to the close proximity of the breast relative to the nose, patients can get overwhelmed by malodour from the wound leading to low mood, low appetite and low self-esteem. Brenda continued with the cinnamon odour controlling dressings on an ad hoc basis dependent on any malodour.

Discussion

Ultimately the aim of wound management in fungating lesions is not to progress the wound to healing but to manage symptoms and improve quality of life by ameliorating the physical symptoms, in Brenda's case mainly malodour. This is normally attained by means of appropriate dressings.

The cinnamon odour controlling product is a non-adhesive secondary dressing designed to eliminate unpleasant odours and absorb exudate. It consists of an absorbent layer together with a sterile sachet containing cinnamon. Cinnamon adsorbs unpleasant-smelling volatile organic compounds emanating from the wound and masks residual odours with the spice's natural fragrance. The cinnamon powder used in the odour controlling dressing was selected from several varieties for its specific olfactory and adsorption properties after multiple sensory perception tests and chemical analysis. The cinnamon odour controlling dressing components allow the passage of air and moisture to prevent maceration.

Conclusion

For Brenda it was important that decisions on wound care focused on adding life to years not years to life. It is important to remember that what is best for the wound might not necessarily be what is best for the patient and their quality of life. Brenda found the dressing regimen comfortable and was relieved that she could no longer smell her wound which at times impacted on her appetite due to nausea.

References

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FC 200POS004/01-10.22