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Wound Dressings During Radiotherapy for Cancer: A Survey of Practice

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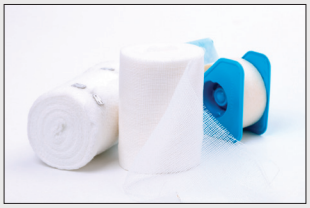

Background: Patients undergoing radiotherapy may experience changes to the skin that require dressings. Recommendations regarding radiating through wound dressings have been variable and relate to the concern regarding surface dose increase or bolus effect.

Objectives: The purpose of this article is to identify current evidence and practice through literature review and a national environmental scan.

Methods: Nurses from 18 radiation oncology centers in Canada were surveyed about current practice. In-depth telephone interviews were conducted with four nurse participants to further understand the context of this issue within the nursing practice environment.

Findings: The integrated results of the study were reviewed with five clinical experts to make recommendations for research, practice, leadership, and policy. Implications for clinical practice included the involvement of radiation oncology nurses in the treatment planning team, development of clinical practice tools, and the relevance of the Person-Centered Nursing framework for wound management during radiotherapy.

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Wounds are common among patients with cancer undergoing radiotherapy. The management of these wounds, such as the standard removal of wound dressings prior to daily fractionated radiotherapy, can be a source of discomfort for patients and a challenge for the nurses involved. At a patient's request and with the approval of the radiation oncologist, very thin dressings have been left in place during the radiation treatment in some settings. However, little evidence exists to inform whether removing the dressing alters the wound bed and affects the healing process or whether the radiation dose changes when delivered through a dressing. As suggested by Hollinworth and Mann (2010), "Further consideration could be given to leaving the product in place and the radiotherapy dose recalculated on an individual patient basis . . . during the initial radiotherapy planning stage" (p. 63). In this article, the authors present the results of a study that examined current evidence and practice in relation to wound dressings during cancer radiotherapy.

Literature Review

Radiation-induced dermatitis is one of the most common side effects of external beam radiotherapy (Harris et al., 2012) and has the potential to affect an individual's quality of life. Patients with dermatitis may suffer in a variety of ways: changes in body image, physical discomfort such as pain and itching, and difficulty with activities of daily living (McQuestion, 2006). If the resulting wounds require a dressing, clinicians have to choose from a plethora of dressing products. Dressings are chosen taking into account goals of care such as managing exudate, facilitating a moist wound environment, and minimizing pain and bleeding. These products often include antimicrobial dressings—silver being the most common or popular among