Radiodermatitis

Clinical summary of the ONS Guidelines™ for cancer treatment-related radiodermatitis

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Approximately 50%-70% of patients with cancer will receive radiation therapy. Radiodermatitis is one of the most common side effects of radiation therapy, with as many as 95% of patients experiencing some degree of skin change. Radiodermatitis can cause pain, itching, and burning and potentially has a significant impact on a patient's quality of life. If radiodermatitis becomes severe, it can cause treatment interruption. The prevalence of radiodermatitis coupled with the effect this side effect can have on quality of life prompts the need for evidence-based recommendations for management.

KEYWORDS

radiodermatitis; radiation therapy; guidelines; symptom management

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THIS DOCUMENT ACTS AS THE CLINICAL SUMMARY component of the Oncology Nursing Society (ONS) Guidelines™ for cancer treatment-related radiodermatitis (Gosselin et al., 2020) and the systematic review for the synthesis of evidence on the topic (Ginex et al., 2020). The ONS Guidelines are based on a rigorous systematic review of randomized clinical trials designed to establish the evidence-based efficacy of interventions to manage radiodermatitis. The GRADE (Grading of Recommendations Assessment, Development and Evaluation) approach was used to assess the certainty of the evidence and make the radiodermatitis recommendations presented in this clinical summary (Guyatt et al., 2011).

How the Guideline Was Developed

This guideline was developed by a panel of healthcare providers, a methods expert, and patient representation. The panel prioritized clinical questions related to minimizing and treating radiodermatitis and patient-important outcomes identified as critical for decision making.

Why the Guideline Matters

Approximately 50%–70% of patients with cancer receive radiation therapy as part of their cancer treatment (American Cancer Society, 2020; Ballas et al., 2006; Wei et al., 2019). Radiation therapy can lead to both acute and late side effects. Radiodermatitis (sometimes referred to as radiation-induced skin reactions, or radiation dermatitis) is one of the most reported side effects of radiation therapy and can affect as many as 95% of patients (Gewandter et al., 2013; Gosselin et al., 2010). Radiodermatitis can have minimal to a significant effect on a patient's quality of life and may also have associated out-of-pocket costs (Schnur et al., 2012).

The ONS Guidelines panel recognized that there is great variability in practice regarding topical interventions for the minimization and treatment of radiodermatitis. The panel decided on questions that they viewed as important to patients and clinicians at this time.

Clinical Practice Recommendations

Assessment and Standard Skin Care

Several grading and assessment tools are used to document skin changes during radiation therapy. Two common tools are the Radiation Therapy Oncology Group grading system (Cox et al., 1995) and the Common