

Instruments to Evaluate Self-Management of Radiation Dermatitis in Patients With Breast Cancer

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PROBLEM IDENTIFICATION: Radiation dermatitis (RD) is an expected side effect of radiation to the breast and chest wall. Healthcare providers routinely grade the severity of RD without assessing its impact on quality of life for patients with breast cancer. Instruments are needed to identify a patient's ability and confidence to self-manage RD.

LITERATURE SEARCH: A search was conducted of published literature from 2001 to 2018 that included patients who had received radiation therapy for breast cancer. A validated instrument was used to assess RD.

DATA EVALUATION: Eleven instruments were identified and evaluated for assessing self-management.

SYNTHESIS: One instrument was identified that measured a patient's ability to self-manage symptoms. The Patient-Reported Outcomes Measurement Information System Self-Efficacy for Managing Chronic Conditions-Manage Symptoms should be considered for clinical integration.

IMPLICATIONS FOR PRACTICE: Using a validated instrument to assess patients' needs and ability to self-manage RD will promote personalized care plans tailored to each patient. Findings can be used to implement a patient-reported outcome measure into clinical practice, develop educational programs for RD management, and create personalized care plans.

KEYWORDS breast cancer; self-management; radiation therapy; radiation dermatitis

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Evidence substantiates better health outcomes for patients who actively engage in disease and symptom self-management (Chou, Kuang, Lee, Yoo, & Fung, 2016; Deshpande, Rajan, Sudeepthi, & Abdul Nazir, 2011). However, healthcare providers may overestimate an individual's skill, confidence, and ability to properly self-manage symptoms. Exclusive of surgery, most breast cancer treatments are delivered in the outpatient setting, underlining the importance of assessing a patient's ability to independently understand, recognize, monitor, and effectively manage symptoms while at home, work, or school.

Breast cancer is the most common form of female cancer. The American Cancer Society (2019) estimated that, in 2019, more than 270,000 new cases of invasive and noninvasive (in situ) breast cancer will have been diagnosed in American women and about 2,670 invasive cases will have been diagnosed in American men. Treatment for breast cancer includes one or more of the following modalities: surgery, lumpectomy (also called breast-conserving therapy [BCT]) or mastectomy, systemic therapy (chemotherapy or endocrine manipulation therapy), and radiation therapy (RT). Although the recommendation for RT depends on factors such as staging and existing comorbidities, a large proportion of newly diagnosed women with breast cancer will undergo adjuvant or neoadjuvant RT (Kole, Kole, & Moran, 2017). RT is also recommended with a breast or chest wall recurrence (Kole et al., 2017).

The goal of RT is to destroy microscopic cells and reduce the possibility of a cancer recurrence or metastasis (Iwamoto, Haas, & Gosselin, 2012). Typical RT for breast cancer is delivered five days a week, and treatment may last three to seven weeks. Unlike systemic chemotherapy side effects, RT side effects are localized to the treatment area. Inflammation of the skin, or radiation dermatitis (RD), is an expected side effect to the breast, axilla, supraclavicular, sternal, or