

# Preemptive Management of Dermatologic Toxicities Associated With Epidermal Growth Factor Receptor Inhibitors

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Epidermal growth factor receptor inhibitors (EGFRIs) are a treatment option for patients diagnosed with advanced-stage gastrointestinal, lung, and head and neck cancers. The most prevalent complications associated with EGFRIs are dermatologic toxicities, which may result in either disruption or discontinuation of treatment and adversely affect patients' quality of life. Nurses play a vital role in educating patients about EGFR-related dermatologic toxicities; therefore, nurses must continue to educate themselves on the various aspects of EGFR treatment. An overview of the EGF signaling pathway is provided, and dermatologic toxicities associated with EGFR treatment are described. A review of several studies evaluating reactive skin treatment regimens also are discussed. Nurses play a critical role in providing patient support. Informing patients about potential EGFR-related symptoms and dermatologic toxicities will help prepare patients for their course of treatment. In addition, nurses should provide patients with a variety of coping strategies to help manage dermatologic toxicities that will assist in enhancing patients' adherence to EGFR treatment.

Oncology nurses treat an increasing number of patients diagnosed with cancer who receive epidermal growth factor receptor inhibitors (EGFRIs). EGFRIs, either alone or in combination with chemotherapy, are the standard of care for the treatment of advanced-stage gastrointestinal (colorectal and pancreatic) (Jonker et al., 2007; Moore et al., 2007; Van Cutsem et al., 2007), lung (Shepherd et al., 2005), and head and neck cancers (Bonner et al., 2006). Treatment with EGFRIs may result in dermatologic toxicities that lead to interruption or discontinuation of patient treatment (Lacouture, Cotliar, & Mitchell, 2007; Molinari, De Quatrebarbes, Andre, & Aractingi, 2005); therefore, management of dermatologic toxicities in patients treated with EGFRIs is crucial to help promote patient adherence with therapy. The purpose of this article is to inform nurses about preemptive management strategies for dermatologic toxicities associated with EGFR treatment. In addition, the important role nurses play in preemptive care working with healthcare providers will be addressed; including educating,

## At a Glance

- ◆ Dermatologic toxicities are the most common side effects associated with epidermal growth factor receptor inhibitor (EGFR) treatment.
- ◆ Nurses should be educated about the benefits of administering a preemptive skin treatment regimen to patients to potentially prevent or minimize dermatologic toxicities associated with EGFR treatment.
- ◆ Oncology nurses can collaborate with physicians to perform a thorough assessment of EGFR-related dermatologic toxicities and provide support and education to patients.

monitoring, and providing supportive care that promotes better understanding of EGFR-related dermatologic toxicities and coping strategies for patients. Results from several studies evaluating the use of preemptive treatments (e.g., topical steroids,

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