■ Article

# Nursing Management of Cutaneous Toxicities From Epidermal Growth Factor Receptor Inhibitors

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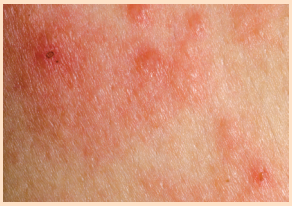

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**Background:** Personalized targeted therapies have become an emerging paradigm in cancer treatment. Although generally more tolerable than other chemotherapeutic agents, one therapy, epidermal growth factor receptor inhibitors (EGFRIs), commonly results in the formation of cutaneous toxicities, which can negatively affect patients' treatment adherence and quality of life.

**Objectives:** The aim of this article is to review nursing management strategies for EGFRI-related cutaneous toxicities.

**Methods:** A systematic literature review was performed, including database searches in PubMed/MEDLINE®, CINAHL®, Cochrane Library, PsycINFO®, and Web of Science.

**Findings:** Nurses are essential to the management of EGFRI-related cutaneous toxicities and are in an ideal position to provide supportive care throughout the course of the EGFRI treatment. The aim of nursing management is to maintain patients' treatment adherence and quality of life by employing a preemptive and proactive approach. Patient education is the most frequently reported management strategy. However, treatment options and management strategies are largely anecdotal and based on individual reports and expert opinions. Although no evidence-based management strategies exist, nurses can rely on existing assessment tools and guidelines to provide patients with symptom management and supportive care.

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Targeted therapies have been an emerging treatment paradigm in oncology for longer than a decade, leading to increased patient survival and making cancer therapy more tolerable (Balagula et al., 2011). Targeted therapies are tailored according to tumor-specific markers and individual patient characteristics (Ballestrero et al., 2012; Chu, 2014; Ma, 2012). They include treatment with a class of epidermal growth factor receptor inhibitors (EGFRIs), which target the respective receptors on cancer cells to suppress tumor growth (Balagula et al., 2011). EGFRIs have been approved by the U.S. Food and Drug Administration for the treatment of cancers, such as breast, cervical, head and neck, renal, esophageal, and metastatic colorectal (Esper, Gale, & Muehlbauer, 2007). They can be used orally or via IV in combination with other chemotherapy drugs as adjuvant therapy, or they can be administered as a single-drug treatment (Balagula et al., 2011; Esper et al., 2007).

Although EGFRIs are associated with fewer side effects compared to other chemotherapies (Balagula et al., 2011; Lucchini et al., 2014; Peuvrel & Dréno, 2014), they prevent epidermal keratinocytes from controlling the intercellular signal transduction pathways responsible for cell proliferation,