Dermatologic Toxicities

A chart review of clinical management among patients with metastatic colorectal cancer treated with panitumumab

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BACKGROUND: At least 90% of patients with metastatic colorectal cancer (mCRC) who are treated with an anti-EGFR will develop a dermatologic toxicity. Preemptive management strategies have been shown to reduce the severity of rash.

OBJECTIVES: This article aims to describe treatment modalities used for the management of dermatologic toxicity among patients with mCRC who were treated with panitumumab and to assess the proportion of patients who were recommended preemptive versus reactive management strategies.

METHODS: This retrospective chart review evaluated different treatment modalities and routes of administration. The modalities were categorized as prescription or over-the-counter. The timing in relation to the first dose of panitumumab was used to define preemptive versus reactive treatments.

FINDINGS: In a sample of 330 patients, only 10% of patients were recommended to begin treatment for rash preemptively. The two most common treatment modalities for preemptively and reactively treated patients were prescription oral antibiotics and prescription topical antibiotics.

KEYWORDS
anti-EGFR; panitumumab; acneform rash; metastatic colorectal cancer

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THERAPIES THAT TARGET THE EPIDERMAL GROWTH FACTOR RECEPTOR (EGFR) are increasingly used for the treatment of metastatic colorectal cancer (mCRC) (Mendelsohn & Baselga, 2006; Tol & Punt, 2010). Although anti-EGFR agents have the benefit of decreased incidence of serious systemic adverse events that are commonly associated with cytotoxic chemotherapies, they are related to a high incidence of adverse dermatologic toxicities (Lacouture et al., 2018). This is because of the sequelae of the EGFR expression in the skin (Hu, Sadeghi, Pinter-Brown, Yashar, & Chiu, 2007). The prototypical cutaneous adverse reaction associated with EGFR inhibitors is acneform eruption, which is the most common form of acute dermatologic toxicity (Lacouture et al., 2018). Acneform rash generally causes pain and pruritus and presents most frequently on sun-exposed areas of the body, including the face, neck, shoulders, upper body, and scalp (Fakih & Vincent, 2010). Although the rash is not life-threatening, it can have a substantial impact on quality of life (QOL) and may lead to discontinued or reduced duration or dose of treatment (Eilers et al., 2010; Rosen et al., 2013; Wagner & Lacouture, 2007). Panitumumab is an anti-EGFR medication used for the treatment of mCRC and is the focus of this retrospective chart review study. About 90% of patients who are treated with an anti-EGFR will develop acneform rash. The majority will have grade 1 or 2 toxicity, and 15%–20% will experience grade 3 or higher acute toxicity (Eilers et al., 2010; Lacouture et al., 2018; Wagner & Lacouture, 2007).

The epidemiology of acute dermatologic toxicities is well described in the literature, but a paucity of data exist related to the real-world management of these pervasive dermatologic toxicities. In addition, guidelines to manage rash are in place, but there are no clinical standards for their treatment. Results from the Skin Toxicity Evaluation Protocol with Panitumumab (STEPP) (Lacouture et al., 2010) and the Japan STEPP (J-STEPP) (Kobayashi et al., 2015) have shown that the severity of panitumumab-associated dermatologic toxicities can be reduced through the implementation of preemptive versus reactive skin management. In these studies, preemptive treatment began one day before the first panitumumab dose and continued from weeks one to six. The regimen consisted of skin moisturizer, sunscreen, 1% hydrocortisone cream, and doxycycline 100 mg twice per day. In addition, a