

NO SToPS: Reducing Treatment Breaks During Chemoradiation for Head and Neck Cancer

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The addition of chemotherapy to radiation aids in the survival of patients with head and neck cancer but also increases acute toxicity, primarily painful oral mucositis and dermatitis exacerbated by xerostomia. The consequences of these side effects often result in hospitalization and breaks in treatment, which lead to lower locoregional control and survival rates. No strategies reliably prevent radiation-induced mucositis; therefore, emphasis is placed on management to prevent treatment breaks. The NO SToPS approach describes specific multidisciplinary strategies for management of nutrition; oral care; skin care; therapy for swallowing, range of motion, and lymphedema; pain; and social support to assist patients through this difficult therapy.

Concurrent chemoradiation therapy can result in an absolute survival benefit of 7% at five years when compared with radiation alone in locally advanced head and neck carcinoma (Pignon, Maitre, & Bourhis, 2007). The addition of chemotherapy as a radiosensitizer also adds to acute toxicity, primarily painful oral mucositis (OM) and dermatitis often complicated by xerostomia. The consequences of these side effects include pain, dysphagia, odynophagia (painful swallowing), dysgeusia (distortion or decreased sense of taste), excessive secretions with gagging, nausea, vomiting, loss of appetite, weight loss, dehydration, infection, fatigue, aspiration, and economic strain, often resulting in hospitalization and breaks in treatment (Bensinger et al., 2008; Patel, Abboud-Finch, Petersen, Marron, & Mehta, 2008; Rosenthal & Trotti, 2009).

Unplanned breaks in radiation treatment from toxicity result in lower locoregional control and survival rates in patients with head and neck cancer (Russo, Haddad, Posner, & Machtay, 2008). Unplanned interruptions or modifications of radiation from ulcerative OM occur in 8%–27% of patients and may reduce the tumor control rate at least 1% for every day that radiation is interrupted (Russo et al., 2008). The rate of hospitalization for severe OM increases by 16% with radiation alone and by 50% with the addition of chemotherapy. Higher OM severity increases costs—as much as \$1,700–\$6,000 depending on grade (Sonis, 2004).

To date, no approved agents or strategies reliably prevent radiation-induced mucositis, so emphasis must be placed on management strategies (Rosenthal & Trotti, 2009). To better manage the side effects and minimize the risk of toxicity-related

At a Glance

- ◆ Daily nursing assessment of weight, vital signs, mucosal and skin integrity, signs of infection, secretion management, hydration, nausea, bowel function, and pain management can lead to early detection of complications for patients with head and neck cancer.
- ◆ The goal of early nutrition, swallowing, and psychosocial interventions is to avoid unnecessary delays or breaks in treatment caused by dietary or resource limitations.
- ◆ Mucositis and dermatitis management strategies are provided in a progressive, stepwise approach according to standardized rating scales.

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