

# Nursing Interventions and Supportive Care for the Prevention and Treatment of Oral Mucositis Associated With Cancer Treatment

June Eilers, PhD, APRN, BC

**Purpose/Objectives:** To review novel approaches to assessing and managing patients with cancer who are at risk for oral mucositis.

**Data Sources:** Published research and review articles, books, conference presentations, and abstracts.

**Data Synthesis:** Oral mucositis is a major source of clinical morbidity among patients with cancer undergoing treatment, yet definitive management strategies continue to elude practitioners. A growing body of evidence suggests that a multifaceted, innovative, targeted approach to oral care provides an important foundation with which to reduce treatment-related morbidity.

**Conclusions:** Ongoing assessment and monitoring are critical to the effective management of oral mucositis. Targeted interventions that incorporate the basic principles of wound care with current knowledge about the temporal aspects of clinical manifestations, evidence-based standardized approaches to assessment, and utilization of novel therapeutics provide an important means by which to improve patient outcomes.

**Implications for Nursing:** Oral care protocols are essential components of oral mucositis management. Incorporating current knowledge of pathophysiology with a targeted, standardized approach may help to reduce overall morbidity and improve quality of life.

Mucositis, an inflammation that may or may not include ulcerations of the mucous membranes, affects an estimated 40%–100% of patients undergoing stomatotoxic chemotherapy, radiation therapy, and blood and marrow stem cell transplant (BMSCT) (National Cancer Institute [NCI], 2003). It remains a serious side effect of cancer treatment with implications for nursing. Mucositis is not confined to the oropharyngeal cavity and can affect the entire gastrointestinal tract. Oral mucositis, which results in disruption in the function and integrity of the oral cavity, can produce significant clinical morbidity (including pain, malnutrition, and local and systemic infections), cause treatment delays and dosage adjustments, increase hospitalizations and costs, and significantly affect functional status and quality of life (QOL). In fact, patients who experienced secondary oral complications associated with chemotherapy-induced oral mucositis reported significant declines in QOL that caused them to discontinue treatment (Redding & Haveman, 1999). Treatment delays, decreases in doses, and lack of adherence to treatments influence the effectiveness of cancer treatment delivered and, ultimately, the likelihood of optimum outcomes.

## Key Points . . .

- ▶ Although oral mucositis remains a major source of clinical morbidity and reductions in quality of life among patients with cancer, a definitive approach for prevention or treatment continues to elude clinicians.
- ▶ Oral care protocols are essential components of an oral mucositis management program. To be effective, they must be evidence-based, goal-driven, and systematically and consistently applied.
- ▶ Ongoing assessment and monitoring are critical to effective oral mucositis management. A novel approach to identifying patients at highest risk and targeting interventions incorporates symptom cluster evaluation coupled with a thorough understanding of the principles of wound care and the temporal aspect of oral complications and their manifestations.
- ▶ Although progress in finding efficacious management strategies has been hampered by an insufficient evidence base, several promising new agents with multiple actions that provide safe symptom relief are in the research pipeline.

Unfortunately, definitive approaches to prevent and treat oral mucositis do not exist at the present time. Clinical interventions often are variable and lack standardization because data on the efficacy of one treatment versus another often are inconsistent or inconclusive. Additionally, patients are not educated routinely on how or why to care for their mouths or assessed for signs and symptoms of oral mucositis.

Despite these challenges, recent work that suggests a multifactorial pathophysiologic basis for mucositis, along with advances in approaches to assessment and the development of novel therapies, may facilitate targeted management strategies.

*June Eilers, PhD, APRN, BC, is a clinical nurse researcher and clinical nurse specialist at The Nebraska Health System in Omaha. (Submitted December 2003. Accepted for publication April 2, 2004.) (Mention of specific products and opinions related to those products do not indicate or imply endorsement by the Oncology Nursing Forum or the Oncology Nursing Society.)*

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