Radiation-Induced Xerostomia: How Dry Is Your Patient?

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Head and neck cancers represent about 5% of the cancers diagnosed annually (Schwartz, Patrick, & Yueh, 2001) and include cancers of the oral cavity, oropharynx, nasal cavity, paranasal sinuses, nasopharynx, larynx, hypopharynx, and salivary glands. In 2003, approximately 27,000 people were diagnosed with cancers of the head and neck, and 7,200 deaths were expected to occur as a result of these diseases (Jemal et al., 2003).

Surgery and radiation therapy are the primary modalities of treatment. Most patients with head and neck cancer receive a course of radiation therapy as a component of treatment. Chemotherapy is added for advanced disease or used as a radiosensitizer.

The management of patients with head and neck cancer undergoing radiation therapy can be a unique challenge for oncology nurses, whether they work in radiation therapy or medical oncology settings. Patients with head and neck cancer often present with many symptoms, such as dysphagia, pain, and weight loss. When treatment is initiated, particularly with radiation therapy and concurrent chemotherapy, these symptoms often are magnified because of the side effects related to treatment. Oncology nurses can have a significant impact on patient outcomes through diligent assessment and ongoing education regarding symptom management.

**Xerostomia**

Most patients receiving radiation therapy to the head and neck region will experience some type of oral complication. Xerostomia is one of the most severe symptoms that patients experience and may become a lifelong problem. This article reviews normal salivary function, effects of radiation therapy on oral mucosa, impact of xerostomia on quality of life, and current treatment strategies used to manage this debilitating side effect. Oncology nurses can have a significant impact on patient outcomes through diligent assessment and ongoing education regarding symptom management.

**Key Words:** radiotherapy, xerostomia

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Digital Object Identifier: 10.1188/04.CJON.61-67

Submitted June 2003. Accepted for publication August 3, 2003. ( Mention of specific products and opinions related to those products do not indicate or imply endorsement by the Clinical Journal of Oncology Nursing or the Oncology Nursing Society.)