

Management of the oral sequelae of cancer therapy



Jones



Rankin

DANIEL L. JONES DDS, PHD, PROFESSOR AND CHAIR, DEPARTMENT OF PUBLIC HEALTH SCIENCES, TEXAS A&M UNIVERSITY HEALTH SCIENCE CENTER BAYLOR COLLEGE OF DENTISTRY, DALLAS, TEXAS; AND
K. VENDRELL RANKIN, DDS, PROFESSOR AND ASSOCIATE CHAIR, DEPARTMENT OF PUBLIC HEALTH SCIENCES, TEXAS A&M UNIVERSITY HEALTH SCIENCE CENTER BAYLOR COLLEGE OF DENTISTRY, DALLAS, TEXAS

CORRESPONDING AUTHOR: DANIEL L. JONES DDS, PHD, PROFESSOR AND CHAIR, DEPARTMENT OF PUBLIC HEALTH SCIENCES, TEXAS A&M UNIVERSITY HEALTH SCIENCE CENTER BAYLOR COLLEGE OF DENTISTRY, 3302 GASTON AVENUE, DALLAS, TEXAS 75246; PHONE: 214-828-8350; FAX: 214-874-4555; E-MAIL: DJONES@BCD.TAMHSC.EDU

ABSTRACT

Oral cancer and the oral sequelae of treatment for oral and other malignancies can significantly affect a patient's oral and systemic health, as well as have a profound impact on quality of life. Compromised oral health prior to, during, and following cancer therapy can affect treatment outcomes. Increasingly, dental professionals in the community are being called upon to provide care for these individuals.

Radiation therapy is routinely used for tumors of the head and neck, delivering a concentrated radiation dose to the tumor, but also to the immediately surrounding tissue. Oral complications are related to the site radiated and the total radiation dose. Cancer chemotherapy is provided as a primary treatment for some cancers and as an adjunctive modality for other cancers. The goal is to eradicate the rapidly growing cells of the tumor, but chemotherapy is often toxic to other cells that rapidly divide normally including the oral mucosa. The use of combined chemotherapy and radiation is now considered standard for most locally advanced tumors of the head and neck. The toxicities of this combined therapy are essentially the same as with radiation alone, but develop more rapidly and are typically more severe when they reach maximum level.

The most common oral sequelae of cancer treatment are: xerostomia, the sensation of a dry mouth as a result of damage to the salivary glands and/or medication; mucositis, the inflammation and ulceration of the oral mucosa; and infection as a result of the loss of mucosal integrity.

Management of oral health during cancer therapy includes identifying at-risk patients, patient education, appropriate pretreatment interventions, and timely management of complications. Appropriate preventive and therapeutic measures will help minimize the risk of oral and associated systemic complications, improve treatment outcomes, and improve the patient's quality of life.

KEY WORDS: oral cancer, radiation therapy, chemotherapy, xerostomia, mucositis, oral infection

Tex Dent J 2012;129(5): 459-466.

Adjunctive Diagnostic Aids in Oral Cancer Screening: An Update



MICHAEL A. HUBER, DDS, ASSOCIATE PROFESSOR AND ORAL MEDICINE SUBJECT EXPERT, DEPARTMENT OF COMPREHENSIVE DENTISTRY, UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO DENTAL SCHOOL, SAN ANTONIO, TEXAS

CORRESPONDING AUTHOR: MICHAEL A. HUBER, DDS, ASSOCIATE PROFESSOR AND ORAL MEDICINE SUBJECT EXPERT, DEPARTMENT OF COMPREHENSIVE DENTISTRY, UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO DENTAL SCHOOL, 7703 FLOYD CURL DR, SAN ANTONIO, TX 78229. PHONE: 210-567-3360; FAX: 210-567-3334. E-MAIL: HUBERM@UTHSCSA.EDU

ABSTRACT

During the past decade, several adjunctive aids have been introduced to the marketplace with the promoted goal of improving the dental practitioner's ability to screen for and identify oral premalignant and malignant lesions (OPMLs). These products include the OralCDx Brush Test®, ViziLite® Plus with TBlue®, Microlux™, VELscope® Vx, Sapphire® Plus, Identafi®, and the DOE Oral Exam System. They are all marketed as aids for the clinician to use in addition to, not in lieu of, the accomplishment of a conventional oral examination (COE). Studies addressing the efficacy of these products when used in the general practice setting to screen for OPMLs are limited and conflicting. The ability to discriminate between truly dangerous OPML against the milieu of benign mucosal lesions remains a concern and further research is necessary to determine the true value of these products as marketed to the general practitioner. The attainment of a complete history and the accomplishment of a thorough and disciplined COE remains the foundation upon which the practitioner assesses the patient for OPMLs. Findings deemed suspicious or equivocal should be referred to an expert for further assessment or undergo immediate biopsy, while findings deemed innocuous should be re-evaluated within 2 weeks and referred to an expert for further assessment or undergo biopsy if still present.

KEY WORDS: oral cancer, screening, autofluorescence, chemiluminescence, OPML

Tex Dent J 2012;129(5): 471-480.

Oral Health Resources for Cancer Patients in Texas



Bitouni



Urankar

ANNETA BITOUNI, DDS, MS, ASSISTANT PROFESSOR, DEPARTMENT OF PUBLIC HEALTH SCIENCES, TEXAS A&M UNIVERSITY HEALTH SCIENCE CENTER BAYLOR COLLEGE OF DENTISTRY, DALLAS, TEXAS; AND YASHASHRI URANKAR, BDS, MPH, CLINICAL ASSISTANT PROFESSOR, DEPARTMENT OF PUBLIC HEALTH SCIENCES, TEXAS A&M UNIVERSITY HEALTH SCIENCE CENTER BAYLOR COLLEGE OF DENTISTRY, DALLAS, TEXAS

CORRESPONDING AUTHOR: ANNETA BITOUNI, DDS, MS, ASSISTANT PROFESSOR, DEPARTMENT OF PUBLIC HEALTH SCIENCES, TEXAS A&M UNIVERSITY HEALTH SCIENCE CENTER BAYLOR COLLEGE OF DENTISTRY, 3302 GASTON AVE, DALLAS, TX 75246; PHONE: 214-828-8350; E-MAIL: ABITOUNI@BCD.TAMHSC.EDU.

ABSTRACT

Over 1.4 million new cases of cancer are diagnosed each year, and many of these patients will, by necessity, be treated in private practice, including dental practice. Dental professionals play a key role in helping patients understand that good oral care can prevent or reduce oral complications. Treatment of oral cancers and other malignancies cause oral sequelae that can compromise patients' quality of life and dictate reduction or discontinuation of optimal therapeutic regimens, which in turn reduces the odds of long-term survival. This can be prevented or better managed if dental and medical health care providers work together. The purpose of this article is to identify the cancer centers associated with dental clinics and the dental practitioners in the state of Texas, including maxillofacial prosthodontists, with training and/or a special interest in providing oral care to cancer patients. To be included on the list, which will be available on the Dental Oncology Education Program (DOEP) Web site (doep.org), please contact Grady Basler at the DOEP office (grady@doep.org), or the Department of Public Health Sciences (214-828-8350).

KEY WORDS: cancer center, Texas, oral, patient, dental practitioner

Tex Dent J 2012;129(5): 483-488.

Evidence-based Clinical Recommendations Regarding Screening for Oral Squamous Cell Carcinomas

MICHAEL P. RETHMAN, DDS, MS; WILLIAM CARPENTER, DDS, MS; EZRA E.W. COHEN, MD; JOEL EPSTEIN, DMD, MSD, FRCD(C), FDS RCS(Ed); CASWELL A. EVANS, DDS, MPH; CATHERINE M. FLAITZ, DDS, MS; FRANK J. GRAHAM, DMD; PHILIPPE P. HUJOEL, MSD, PHD; JOHN R. KALMAR, DMD, PHD; WAYNE M. KOCH, MD; PAUL M. LAMBERT, DDS; MARK W. LINGEN, DDS, PHD; BERT W. OETTMEIER JR., DDS; LAUREN L. PATTON, DDS; DAVID PERKINS, DMD; BRITT C. REID, DDS, PHD; JAMES J. SCIUBBA, DMD, PHD; SCOTT L. TOMAR, DMD, DRPH; ALFRED D. WYATT JR., DMD; KRISHNA ARAVAMUDHAN, BDS, MS; JULIE FRANTSVE-HAWLEY, RDH, PHD; JENNIFER L. CLEVELAND, DDS, MPH; DANIEL M. MEYER, DDS; FOR THE AMERICAN DENTAL ASSOCIATION COUNCIL ON SCIENTIFIC AFFAIRS EXPERT PANEL ON SCREENING FOR ORAL SQUAMOUS CELL CARCINOMAS

RETHMAN MP, CARPENTER W AND COLLEAGUES. EVIDENCE-BASED CLINICAL RECOMMENDATIONS REGARDING SCREENING FOR ORAL SQUAMOUS CELL CARCINOMAS. JADA 2010;141(5):509-20. COPYRIGHT © 2010 AMERICAN DENTAL ASSOCIATION. ALL RIGHTS RESERVED. REPRINTED BY PERMISSION.

THIS ARTICLE HAS BEEN PEER REVIEWED.

ABSTRACT

Background: This article presents evidence-based clinical recommendations developed by a panel convened by the American Dental Association Council on Scientific Affairs. This report addresses the potential benefits and potential risks of screening for oral squamous cell carcinomas and the use of adjunctive screening aids to visualize and detect potentially malignant and malignant oral lesions.

Types of Studies Reviewed: The panel members conducted a systematic search of MEDLINE, identifying 332 systematic reviews and 1,499 recent clinical studies. They selected 5 systematic reviews and 4 clinical studies to use as a basis for developing recommendations.

Results: The panel concluded that screening by means of visual and tactile examination to detect potentially malignant and malignant lesions may result in detection of oral cancers at early stages of development, but that there is insufficient evidence to determine if screening alters disease-specific mortality in asymptomatic people seeking dental care.

Clinical Implications: The panel suggested that clinicians remain alert for signs of potentially malignant lesions or early-stage cancers while performing routine visual and tactile examinations in all patients, but particularly in those who use tobacco or who consume alcohol heavily. Additional research regarding oral cancer screening and the use of adjuncts is needed.

KEY WORDS: American Dental Association (ADA), biopsy, brush, cancer, carcinoma, squamous cell, evidence-based dentistry, mouth neoplasms, oral cancer, practice guidelines

Tex Dent J 2012;129(5): 491-507.