Epidemiology and Demographics of the Head and Neck Cancer Population

Natasha Cohen, Stacey Fedewa, and Amy Y. Chen

Head and neck malignancies comprise a heterogeneous group of malignancies that cause significant morbidity to those affected. These malignancies are associated with specific risk factors and exposures, some of which affect prognosis. The most common risk factors for developing head and neck cancers are tobacco and alcohol use. Marijuana and e-cigarettes, occupational exposures, and use of topical substances have also been linked to head and neck cancers. Human papilloma virus has been associated with oropharyngeal cancer. Measures such as oral hygiene, screening, smoking cessation, and vaccination have been taken to decrease the incidence and morbidity of head and neck cancers.

Framework for Speech-Language Pathology Services in Patients with Oral Cavity and Oropharyngeal Cancers

Loni C. Arrese and Katherine A. Hutcheson

This article provides a framework for speech-language pathology services to optimize functional outcomes of patients with oral cavity and oropharyngeal cancers. Key principles include (1) a proactive rehabilitation model that minimizes intervals of disuse or inactivity of speech and swallowing systems, (2) standardized evaluation paradigms that combine objective instrumental assessments with patient-reported outcome measures, and (3) systematic methods for surveillance and intensive rehabilitation for late dysphagia.

Nutrition and Perioperative Care for the Patient with Head and Neck Cancer

Amarbir Gill, Donald Gregory Farwell, and Michael G. Moore

Recovery after major head and neck cancer surgery is a complex process. These patients frequently suffer from malnutrition, in addition to perioperative sequelae such as pain, wound infections, venous thromboembolism (VTE), and pneumonia. The authors provide a contemporary evidence-based approach to common aspects of perioperative care to guide the clinician in the optimal management of patients. Particular emphasis is placed on the preoperative education of patients and the identification and management of malnutrition around the time of surgery. This article discusses recommendations for perioperative antibiotics, pain management, and prophylaxis against VTE and pneumonia in this patient population.

Imaging of Patients with Head and Neck Cancer: From Staging to Surveillance

Daniel P. Seeburg, Aaron H. Baer, and Nafi Aygun

In this article, the authors summarize the latest imaging methods and recommendations for each of the various steps in managing patients with head and neck cancer, from staging of disease to posttreatment surveillance. Because staging of head and neck cancers is different for various subsites of the head and neck, imaging is
discussed separately for each. A separate discussion of imaging of perineural spread, occult primary tumors, and lymph nodes is followed by a discussion of paradigms for surveillance imaging in the posttreatment neck.

**Multidisciplinary Team Planning for Patients with Head and Neck Cancer** 435

Thomas D. Shellenberger and Randal S. Weber

The multidisciplinary team planning conference is critical in the evaluation and management of patients with head and neck cancer. The management is complex and dictates the care of a multidisciplinary team for optimal results. First, the head and neck multidisciplinary team ensures the complete evaluation of patients before beginning treatment. Second, the team improves the accuracy of diagnosis and staging on which to base the most appropriate treatment. Third, the team improves the outcomes of treatment by appealing to the best available evidence, by following clinical practice guidelines and treatment algorithms and by engaging in clinical research trials.

**Oral Assessment and Management of the Patient with Head and Neck Cancer** 445

Herve Y. Sroussi, Maryam Jessri, and Joel Epstein

Patients undergoing treatment of head and neck cancer risk developing significant acute and chronic changes that affect the hard and soft tissue of the oral cavity and the head and neck region. This article discusses considerations and recommendations for patients before, during, and after treatment of head and neck cancer. The objective of these recommendations is to maintain oral health, compensate for treatment- and disease-associated morbidities, and improve quality of life. To achieve this objective, treatment of head and neck cancer must include an oral evaluation and management plan well integrated within the overall oncologic treatment plan from the initiation of therapy.

**Head and Neck Cancer Research and Support Foundations** 459

Joshua E. Lubek

Ongoing genetic and epigenetic research involving DNA methylation, salivary biomarkers, wild-type p53 tumor suppressor gene proteins, and HPV oncogenes are being directed at identification and treatment of dysplastic and malignant squamous cell mucosal lesions. Research is being conducted to improve immunotherapy drug response rates by increasing the amount of inflammation within the tumor microenvironment. Ongoing research is focused on the application of the antidiabetic drug metformin for the prevention and management of oral squamous cell dysplastic lesions. Professional and nonprofit cancer support organizations are essential for furthering education and research within the area of head and neck cancer.

**Physical Rehabilitation and Occupational Therapy** 471

Lauren C. Capozzi, Naomi D. Dolgoy, and Margaret L. McNeely

Head and neck cancer and associated treatments can have debilitating effects on patient physical function and quality of life. The American Cancer Society’s Head and Neck Cancer Survivorship Care Guidelines recommend that all patients receive an assessment after their treatment to address complications that may affect long-term recovery and function. Evidence supports the role of physical activity, exercise, physical therapy, and occupational therapy to decrease symptom burden after treatment and improve strength, endurance, and function. Physical therapy can play an important role in optimizing jaw, neck, and shoulder function, and occupational therapy can optimize return to work.
Maxillofacial Prosthetics 487

Kamolphob Phasuk and Steven P. Haug

The treatment of head and neck cancers requires a team approach. Maxillofacial prosthetics and oncologic dentistry are involved in many phases of the treatment. After the cancer ablation surgery, if surgical reconstruction cannot completely restore the surgical defect site, maxillofacial prostheses play an important role in rehabilitating the patient’s mastication, swallowing, and speech. For patients undergoing chemoradiation therapy, the outcome is enhanced by jaw positioning stent and fluoride carrier mouthpiece. This perioperative care by maxillofacial prosthetics improves the posttreatment outcomes and the patient’s quality of life.

Psychosocial Effects of Head and Neck Cancer 499

Ali Alias and Melissa Henry

Head and neck cancer is known to be both physically and psychologically challenging. This article summarizes the literature on the psychosocial effects of head and neck cancer by distinguishing features in the preoperative and postoperative periods. It outlines the importance of an integrated collaborative care approach in clinics as well as areas worthy of further program development.