Recommendations for Care of Survivors of Head and Neck Cancer

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GUIDELINE TITLE Head and Neck Cancer Survivorship Consensus Statement
DEVELOPER American Head and Neck Society
RELEASE DATE November 2021 (initial statement)
TARGET POPULATION Primary care and internal medicine physicians

MAJOR RECOMMENDATIONS
- Refer for tobacco and alcohol cessation counseling and abstinence resources as needed (level of evidence 1A).
- Assess for distress, depression, and/or anxiety at regular intervals using a validated questionnaire (level of evidence 1A).
- Evaluate for thyroid dysfunction (thyrotropin/thyroxine) every 6 to 12 months, particularly with prior neck irradiation (level of evidence 2A).
- Consider chest computed tomography with or without contrast as clinically indicated for those with a smoking history (level of evidence 2A).
- Include primary care physician involvement for age- and sex-appropriate screening of other neoplasms and general health and well-being (level of evidence 2A).

Evidence Base
More than half of head and neck cancer survivors are current smokers; 50% continue to smoke after diagnosis, and there is evidence that current smoking increases mortality in oropharyngeal cancer, even when controlling for HPV status. A third of head and neck cancer patients consume more than 3 alcoholic drinks per day, a behavior linked to increased risk of recurrence and depression and other substance use disorders. Prolonged opioid use after treatment has been associated with current tobacco use (odds ratio, 2.94; 95% CI, 1.16-7.46) and history of alcohol abuse (odds ratio, 4.36; 95% CI, 2.11-9.01). The guideline recommends referring these patients for tobacco and alcohol cessation counseling, citing systematic reviews that evaluated cessation programs in this population. Several randomized clinical trials (RCTs) that evaluated smoking cessation programs (both pharmacologic and nonpharmacologic) found significant improvement in cessation rates with a combination approach. Effective pharmacologic agents include nicotine replacement therapy and varenicline, ideally combined with multiple sessions of behavior therapy. Goyal et al found that among the 62 National Cancer Institute-designated cancer centers, only 3 reported outcomes of their tobacco treatment programs and only 75% offered formal programs, indicating a clear need for broader uptake and implementation, including primary care efforts. Patients treated for HPV-associated head and neck cancer should be educated about the role of vaccination in prevention of other HPV-associated cancers and offered treatment for associated guilt, anxiety, and concerns about sexual behaviors.

The emotional and physical stress on patients with head and neck cancer through diagnosis, treatment, and surveillance can be immense, and greater than that experienced by other cancer survivors. Rates of suicidality are twice that of other patients with cancer, triple that of the general US population, and increasing. Given this, regular screening for body image disturbance, distress, depression, and anxiety with validated instruments such as the NCCN Distress Thermometer, Patient Health Questionnaire 9, or others is strongly recommended in this population. The guideline authors note that mental and

Summary of the Clinical Problem
Head and neck cancer affects about 66,000 patients and causes 15,000 deaths annually in the US. More than 90% of cases are due to squamous cell carcinoma (SCC) that originates from the oral cavity, oropharynx, and larynx. The epidemiology of SCC of the head and neck (HNSCC) has shifted in recent decades, with an increase in human papillomavirus (HPV)-associated SCC of the oropharynx and a decrease in tobacco- and alcohol-associated SCC, with important race and sex differences in access to care and survival. Patients often present with locoregionally advanced disease, leading to important morbidities of speech, deglutition, and cosmesis that stem both from the disease and its treatment, which often involves a combination of surgery, chemotherapy, and radiation. Most recurrences occur in the first few years after treatment. The National Comprehensive Cancer Network (NCCN) recommends integration of primary care in survivorship care within 1 year of completion of treatment, complementary to the oncology team. There has been an increased focus and maturation of the concept of cancer survivorship since previous efforts. The current guidelines offer a concise summary of best practices for this integrated care.

Characteristics of the Guideline Source
The American Head and Neck Society exists to “advance education, research, and quality of care for the head and neck oncology patient” and is the largest organization of its kind in North America. The guideline group was composed of surgical, radiation, and medical oncologists. No funding conflicts were reported (Table).

Table. Guideline Ratings

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<thead>
<tr>
<th>Mathematical statement</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Establishing transparency</td>
<td>Good</td>
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<tr>
<td>Management of conflicts of interest in the guideline development group</td>
<td>Good</td>
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<tr>
<td>Guideline development group composition</td>
<td>Good</td>
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<tr>
<td>Clinical practice guideline-systematic review intersection</td>
<td>Fair</td>
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<tr>
<td>Establishing evidence foundations and rating strength for each of the guideline recommendations</td>
<td>Good</td>
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<td>Articulation of recommendations</td>
<td>Fair</td>
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<td>External review</td>
<td>Poor</td>
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<td>Updating</td>
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<td>Implementation issues</td>
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emotional health support is often underused and early referral to psychiatry/psychology is recommended. High rates of chronic pain and long-term opioid dependence further complicate care. Screening with validated instruments should be accompanied by multimodal analgesia plans and pain management, when appropriate. Issues stemming from dysphagia, effects of treatment on dentition, and lymphedema may all negatively affect quality of life and self-image. Close follow-up with speech therapy, dental professionals, and physical therapy are all recommended (level of evidence 2A, 1B, and 2A, respectively).

Hypothyroidism occurs in a third to nearly half of patients who receive radiation to their neck, often as a late sequela, and can have a role in depression and wound healing. In patients who have undergone irradiation of the neck, regular evaluation for thyroid dysfunction by measuring thyrotropin and thyroxine is recommended. Patients who have undergone extensive neck surgery are at risk of inadvertent injury to the thyroid or its blood supply and should also be screened.

The high pretreatment and posttreatment prevalence of tobacco use in patients surviving head and neck cancer also increases risk of primary lung cancer. Analysis of the National Lung Screening Trial (NLST) found that patients with history of head and neck cancer and tobacco use in patients surviving head and neck cancer also increases risk of primary lung cancer. The majority of these patients already qualify for lung cancer screening under current guidelines and would likely receive greater benefit from screening relative to the general population. Robust communication between oncology teams and primary care clinicians is paramount to successful care of head and neck cancer survivors. As the frequency of visits with the oncology teams decreases after the first year, it becomes particularly important that primary care clinicians are aware of sequelae of treatment, the screening and treatment recommendations in these guidelines, and the importance of identifying symptoms concerning for recurrence or second primary cancers. Primary care clinicians should also facilitate regular patient follow-up with an otolaryngologist/head and neck surgeon for head and neck-specific examination, even in the absence of concerning symptoms. Early detection of new odynophagia, otalgia, neck mass, or other concerning findings or symptoms should prompt early return to the oncology team for further evaluation. Other age- and sex-appropriate screening and preventive care can be overlooked after a cancer diagnosis but remains important in survivors of head and neck cancer.

Discussion

Primary care clinicians have a critical role in the management of patients who survive head and neck cancer. Awareness of the signs and symptoms suspicious for recurrence is critical for timely referral and intervention, as recurrence can often be treated with curative salvage therapy. These cancers may recur at the primary site, locoregionally as a new neck mass, or as a distant metastasis. Rates of recurrence vary depending on the primary tumor characteristics, treatment modality, and primary site. The 5-year overall survival in patients with stage I-II disease is currently 70% to 90% but is poorer in patients with stage III-IV disease. As an example, patients with locoregionally advanced laryngeal carcinoma are reported to have an approximate overall survival of 40% at 5 years.

Areas for Future Research

Given the prevalence of tobacco and alcohol use, RCTs on effectiveness of smoking cessation programs in this population are needed and are currently being conducted (NCT02816697, NCT02582008). These guidelines represent important outreach to clinicians who provide care for these patients outside of cancer-focused contexts. Ongoing efforts to support prevention and early recognition of HNSCC are crucial to reducing the overall burden of this disease on patients and should include efforts to improve general access to care, HPV vaccination in teens and young adults, and education to support patient and clinician recognition of earlier cancer. Approaches such as navigation-based multilevel interventions have shown promise in delivering timely, guideline-adherent therapy and reducing race disparities, and deserve further study.

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**Conflict of Interest Disclosures:** None reported.

**REFERENCES**


**Associated Guidelines and Other Resources**

- NCN Distress Thermometer
- Patient Health Questionnaire 9