

Reviewing Smokeless Tobacco Epidemiology, Carcinogenesis, & Cessation Strategy for Otolaryngologists

Stanisce Luke, MS4,¹ Kristin Levin, M.D.,¹ Nadir Ahmad, M.D.,² Yekaterina Koshkareva, M.D.²



¹Department of Biomedical Sciences, Cooper Medical School at Rowan University, Camden, NJ;
²Department of Otolaryngology – Head and Neck Surgery, Cooper University Hospital, Camden, NJ.



Introduction

Despite the declining prevalence of smoking tobacco use, the rates of smokeless tobacco (ST) usage remain constant.^{3,4} Known to contain addictive and carcinogenic substances, the IARC, NCI, and US Surgeon General have all acknowledged ST use as a risk factor for the development of cancer, particularly in the oral cavity.^{6,12}

Of such products, oral snuff and tobacco-containing dentifrice are grossly underrepresented in head and neck cancer (HNC) literature. The prevalence of ST usage and otolaryngology-related consequences pose a concern in the ENT community, with the prominent need to identify usage among our patients and counsel them on cessation.

Case Presentation

A 58-year old, Indian-born immigrant female presented with a one-month history of progressive dyspnea, dysphonia, dysphagia, and a 10lb weight loss. She reported no history of smoking, second-hand smoke exposure, or alcohol use. She reported a lifelong use of *IpcO Creamy Snuff* toothpaste, a tobacco-based dentifrice which she applied to the gums and teeth for daily oral hygiene.

CT neck and direct laryngoscopy showed an obstructive supraglottic mass. She underwent emergent tracheotomy. Biopsy revealed a p16 negative moderately differentiated squamous cell carcinoma (SCC). Imaging was negative for metastases. The patient underwent a total laryngectomy, partial pharyngectomy, right hemi-thyroidectomy, and bilateral SND (levels II-IV). All nodes were negative and final pathology confirmed a T3N0 SCC with negative margins.

There was no adjunctive treatment. She has remained disease free at 10-month follow up.

“You can avoid potential harmful effects as you rinse your mouth with clean water after using IPCO.”
 – IPCO Website



Incidence & Carcinogenicity

- In the US, ~4% of adults used ST within the last 30 days, with nearly 7% of all male adults being active users.^{5,6}
- Highest rates in Wyoming (8.8%), West Virginia (8.5%). Lowest rates in Delaware, Massachusetts (1.5%).²⁹ Pennsylvania (4%), NJ (2.3%), Ohio (4.7%).²⁹
- High-school and college athletes have increased usage compared to non-athletes; 10% of high-school athletes are active ST users. Prevalence is 6%, 10%, 11%, and 13% among students participating in zero, one, two, or three sports teams, respectively.²⁹
- Nearly 5% of adults in India (3.3% of males, 6.3% of females) apply tobacco-containing products as dentifrice.^{9,32} The leading form among female ST users was tobacco toothpastes (41.3% of all female ST users).³⁴
- ST usage (> 20 times) in never smokers is associated with HNC SCC (OR 4.21).¹⁵
- Oral snuff use in never smokers is associated with HNC (OR 1.7); particularly oral (OR 3.0) and hypopharyngeal (OR 2.85) cancers.^{14,28}

Cessation Recommendations

General Interventions:

- Otolaryngologists should educate identified smokeless tobacco users about the potential health risks associated with long-term usage, advise them to stop, and document any efforts made during the encounter. (High)

Pharmaceutical Interventions:

- Treatment with varenicline demonstrated an increase in long-term (> 6 months) ST abstinence rates compared to placebo. Varenicline therapy should be considered when pharmaceutical intervention is warranted. (Moderate)
- Bupropion SR (*Wellbutrin*) therapy has not been demonstrated to increase short- or long-term absence, thus is not currently recommended. (Moderate)
- Nicotine Replacement Therapy – nicotine patches, gum, or lozenges – have not displayed favorable efficacy in long-term smokeless tobacco abstinence over placebo treatments, thus is not currently recommended. (Moderate)

Behavioral Interventions:

- Including out-of-office telephone support as a component of the intervention showed benefit of increasing abstinence rates. (Low)
- Otolaryngologists should offer referral to specialist treatment services, such as behavioral health. (Low)
- The use of non-nicotine oral substitutes, such as herbal mint chews, chewing gum, or cinnamon sticks, may help reduce cravings and symptoms of withdrawal; however, their use has not been demonstrated to increase abstinence rates. (Low)

Summarized from data presented in Stanisce L., Levin, K., Ahmad, N., Koshkareva, Y. *Reviewing Smokeless Tobacco Epidemiology, Carcinogenesis & Cessation Strategy for Otolaryngologists. The Laryngoscope. (E-pub ahead of print). 2018 February; In press. PMID: 9427388.* The order of references was preserved per the complete text. For a comprehensive list of references, please refer to the full text.

Symptomatic Medicare Patient

HCPCS/CPT Code	Description
99406	Counseling visit greater than 3 minutes but less than 10 minutes
99407	Counseling visit greater than 10 minutes

Asymptomatic Medicare Patient

HCPCS/CPT Code	Description
G0436	Counseling visit greater than 3 minutes but less than 10 minutes
G0437	Counseling visit greater than 10 minutes

Private/Commercial Insurance Patient

HCPCS/CPT Code	Description
99406	Counseling visit greater than 3 minutes but less than 10 minutes
99407	Counseling visit greater than 10 minutes
99401-99412	Preventative Medicine, Individual Counseling
S9075	Smoking Cessation Treatment

ICD-10 CM Diagnosis Code and Description

F17.200	Nicotine Dependence, Unspecified, Uncomplicated
F17.201	Nicotine Dependence, Unspecified, In Remission
F17.220	Nicotine Dependence, Chewing Tobacco, Uncomplicated
F17.221	Nicotine Dependence, Chewing Tobacco, In Remission
F17.290	Nicotine Dependence, Other Tobacco Product, Uncomplicated
F17.291	Nicotine Dependence, Other Tobacco Product, In Remission
Z87.891	Personal History Of Nicotine Dependence†

† only to be used for asymptomatic or private/commercial insurance patients