

INFLUENCE OF SNUS ON THE ORAL MUCOSA OF CHILDREN

Šejla Pošković*, Hanela Gojak

Public Health Center Sarajevo, Sarajevo, Bosnia and Herzegovina

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*Corresponding author

Dr Šejla Pošković
Specialist in Pediatric and
Preventive Dentistry
Public Health Center Sarajevo,
Sarajevo, Bosnia and
Herzegovina
Phone: +387 (0)61 219 054
Email: sejlaposkovic@gmail.com

ABSTRACT

Snus use among children and adolescents is increasing, largely due to online availability and informal distribution despite legal restrictions. The oral mucosa of children is particularly vulnerable to the harmful effects of snus because it is thinner, more permeable, and more sensitive than adult mucosa. As a result, exposure to nicotine, nitrosamines, and chemical irritants leads to rapid development of mucosal lesions, including reactive leucoplakia, ulcerations, hyperkeratosis, gingival inflammation, and disturbances in the oral microbiome. Mechanical irritation from the snus pouch further exacerbates tissue damage. Psychological factors, such as peer influence and misconceptions about snus being less harmful than cigarettes, contribute to its rising use. Dentists play a crucial role in early detection, parental education, and prevention. Interdisciplinary collaboration is essential to mitigate the health risks associated with snus use in children.

Key words: Snus, Smokeless tobacco, Oral mucosa lesions, Children and adolescents, Reactive leucoplakia, Hyperkeratosis, Gingival recession, Oral microbiome, Public health, Dental prevention.

Introduction

Snus is a form of smokeless tobacco placed in the oral cavity, most commonly between the gingiva and the mucosa of the cheek or lip. Although its sale is legally prohibited to minors, online availability and private distribution channels have led to a rapid increase in use among children and adolescents. This trend represents a major public health issue, particularly due to the high nicotine content and numerous irritants that act directly on oral structures.

The oral mucosa of children is anatomically thinner, less keratinized, and more sensitive compared adult mucosa. Because of this, children exhibit faster and more intense reactions to harmful substances from snus. Harmful effects include inflammation, hyperkeratosis, ulcerations, gingival changes, and disruption of the microbiological balance. Since this is an increasingly common occurrence, dentists play an important role in early detection and education.

Discussion

1. Pharmacological and mechanical effects of snus in children

Snus contains high concentrations of nicotine, nitrosamines, and other chemical compounds that are rapidly absorbed through the oral mucosa. In children, due to pronounced vascularization and thinner epithelium, absorption occurs more quickly, increasing the risk of systemic and local effects. Mechanical pressure from the snus pouch causes chronic microtrauma, further aggravating mucosal damage.

2. Clinical changes in the oral mucosa

Reactive leucoplakia: A white, thickened area often develops at the site where the snus pouch is held. Ulcerations and erosions are the result of chemical irritation. Gingival changes include localized gingivitis and recession. Snus also alters the oral microbiome, increasing the risk of caries and periodontal disease. Premalignant changes may occur with long-term use.

3. Psychological aspects

Adolescents often use snus due to peer pressure or the belief that it is "less harmful than cigarettes."

4. Role of the dentist and prevention

The dentist should regularly examine the mucosa, educate parents, and provide advice on discontinuing snus use. Early detection of most lesions leads to complete regression of changes.

Conclusion

The harmful effects of snus use among children and adolescents are becoming an increasingly significant concern in dental practice.

Snus causes numerous changes to the oral mucosa, including ulcerations, hyperkeratosis, gingival changes, and microbiome disturbances. The dentist has a responsible role in identifying at-risk children, early detection of lesions, and educating parents and the school community. Prevention and an interdisciplinary approach are key to reducing the harmful consequences of snus use in children.

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