



Patients with Nicotine Use Disorders

Wilkins Text Chapter 32

But First an Introduction

Name: Komal Kaur RDH

Education: BSDH at IUSB (Graduated in 2021),
Currently working on MSDH through ODU

Why am I here?

Health Hazards/Current Trends

- Tobacco use is the most preventable cause of disease and premature death in the world
- Oral and systemic health effect add up with tobacco use
- Types of tobacco uses include:
 - Cigars
 - Cigarillos
 - Regular pipe
 - Waterpipe (Hookah)
 - Electric cigarettes
 - Smokeless tobacco
 - ENDS: Electronic nicotine delivery systems

Components of Tobacco Products and Smoke

- Nicotine is an addictive psychoactive ingredient in tobacco which is also considered to be toxic.
- Ignition causes **mainstream smoke**
- **>90 chemicals** in tobacco products and smoke found to be unsafe
- **Carcinogenic**
- Refer to Wilkins Table 32-1 for nicotine levels



Nicotine Addiction

- Addiction: “chronic, progressive, relapsing disease characterized by compulsive use of a substance”
- Tolerance
 - User’s need to smoke or chew the same product which can decrease the effectiveness = resulting in more product use

Metabolism of Nicotine

- Absorption can occur through:
 - Lungs
 - Skin
 - Oral mucosa
 - Buccal mucosa
 - GI Tract
- Metabolized by liver
- pH levels: the more basic, the easier to absorb
 - Chewing tobacco is more alkaline

See figure 32-1 for components of mainstream smoke and absorption

Systemic Effects

Cardiovascular Diseases:

- Atherosclerosis
- Coronary heart disease

Pulmonary Diseases:

- COPD: chronic obstructive pulmonary disease
- Emphysema
- Chronic Bronchitis: excess mucus

Systemic Effects cont.

Cancer:

- Lung cancer, leading cause of death among cancers
- Smoking can cause various types of cancer (Table 32-2)

Tobacco Use and Other Drugs:

- Tobacco use can contribute to alcohol use

Prenatal and Children

- Nicotine use during pregnancy
 - Miscarriage
 - Low birth weight
 - Placenta previa
 - Preterm delivery
 - Spontaneous abortion
 - Stillbirth
 - Orofacial clefts



Prenatal and Children cont.

- Infancy
 - Chemicals are passed down from breast milk
 - ETS can cause respiratory issues
- Children
 - ETS can affect lung development
 - Secondhand smoking can cause early onset asthma and wheezing

Oral Manifestations of Tobacco and Nicotine Use

Cancer and Precancer	Periodontal Factors	Soft-Tissue	Hard-Tissue	Esthetic Factors	Oral Signs in Systemic Diseases
<p>Squamous Cell Leukoplakia (Smokeless)</p> <p>Lung Cancer</p> <p>Oral Cancer</p> <p>Nonhomogeneous</p> <p>Homogenous</p>	<p>Acute necrotizing ulcerative gingivitis and periodontitis (ANUG and ANUP)</p> <p>Relapse during maintenance</p> <p>Recession and CAL</p> <p>Increased risk for peri-implantitis and peri-implant bone loss</p>	<p>Nicotine stomatitis (Pipe)</p> <p>Smoker's melanosis</p> <p>Black hairy tongue</p> <p>Median rhomboid glossitis</p> <p>Leukoedema (pipe)</p> <p>Hyperkeratosis (smokeless)</p> <p>Dry Socket</p> <p>Delayed wound healing</p>	<p>Occlusal or incisal abrasion (pipe and smokeless)</p> <p>Cervical abrasion (smokeless)</p> <p>Tooth loss</p>	<p>Halitosis</p> <p>Dental stains</p> <p>Prosthetic stains</p> <p>Orthodontic appliance stains</p> <p>Discoloration of restorations</p> <p>Impaired taste and smell</p>	<p>Excretion of HIV/AIDS</p> <p>And</p> <p>Type 1 and Type 2 Diabetes</p>



Leukoplakia



ANUP



Staining



Question:

Have you seen any of
theses oral
manifestations in clinic?

Tobacco and Periodontal Infections

Tobacco use is a major risk factor

- Gingivitis:
 - Decreases inflammatory response
 - Affects treatment and can eventually lead to gum disease
- Periodontitis
 - Decrease of blood flow = less BOPs
 - Decrease in immune response
 - Leading to increased chance of bone loss, CAL, pocket depths

Withdrawal

Refers to “the effects of cessation of nicotine use by an individual in whom dependence is established”

Withdrawal symptoms may include:

- Dysphoric or depressed mood
- Insomnia
- Irritability, frustration, anger
- Anxiety
- Difficulty concentrating
- Restlessness
- Decreased heart rate
- Increased appetite or weight gain
- Cravings for substance

See Table 32-4 for activities to help with withdrawal symptoms

Care Plan

Assessment:

1. Patient History

Tobacco use status is determined
Identify use of other psychoactive drugs
Check vital signs

2. Extraoral examination

Breath and body odor

Fingers

Skin

Lips

3. Intraoral examination

Look for oral consequences of tobacco
(Table 32-3)

Clinical Treatment Procedures

Patients that are tobacco users may require longer and more frequent appointments due to increase of:

- Dental staining
- Calculus
- Dental caries
- Gingival inflammation
- Periodontal issues

1. Dental Biofilm Control

1st priority is self-care for daily biofilm control due increased chance of dental problems
Encourage regular dental care (brushing 2x a day, Flossing) Recommend dental products

2. Nonsurgical Periodontal Therapy

Inform patient that healing will be delayed because of tobacco use and results will vary
Tobacco cessation will help to improve results

3. Diet and Nutrition

Tobacco users may have a poor diet due to effect of tobacco use
Tobacco cessation focuses on diet as well



Questions?



Thank You