## Running head: smokeless tobacco and oral cancer

Health & Medicine, Cancer



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Running Head: SMOKELESS TOBACCO AND ORAL CANCER Smokeless Tobacco and Oral Cancer Diana Candamo DEH2400 Oral Pathology September 22, 2011 Broward College Smokeless Tobacco and Oral Cancer Like cigarettes, smokeless tobacco products contain a variety of toxins associated with cancer (The American Dental Association, 2011). Smokeless tobacco is not burned, but it is chewed and is also known as chewing tobacco, oral tobacco, spit or spitting tobacco, dip, chew, and snuff (National Cancer Institute at the National Institutes of Health, 2010). According to the National Cancer Institute, "People in many regions and countries, including North America, Northern Europe, India and other Asian countries, and parts of Africa, have a long history of using smokeless tobacco products" (National Cancer Institute at the National Institutes of Health, 2010). There are two types of smokeless tobacco: Chewing tobacco and snuff (National Cancer Institute at the National Institutes of Health, 2010). Chewing tobacco is usually placed between the cheeks and lower lips, towards the back of the mouth, while snuff is pinched or pouched between the checks and gums or behind the upper or lower lip (National Cancer Institute at the National Institutes of Health, 2010). Even though the tobacco is being spitted out, the Nicotine in the tobacco is being absorbed through the lining of the mouth as well as at least 28 chemicals that have been found to cause cancer (National Cancer Institute at the National Institutes of Health, 2010). One of the most harmful chemicals found in tobacco is nitrosamines (National Cancer Institute at the National Institutes of Health, 2010). Scientists have found that the nitrosamines level is related to the risk of cancer (National Cancer Institute at the National Institutes of Health, 2010). Smokeless tobacco is

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known to cause cancer in the mouth, lip and tongue (The American Dental Association, 2011). Oral cancer is diagnosed by the following symptoms: A sore or lesion in the mouth that does not heal within two weeks, a lump, a white or red patch on the gums, tongue, tonsils, or lining of the mouth (The Oral Cancer Foundation, 2010). Difficulty chewing or swallowing, moving the jaw or tongue, and numbness of the tongue or other area of the mouth are other possible symptoms of oral cancer (The Oral Cancer Foundation , 2010). Long-term exposure to smokeless tobacco has been associated with an increased risk of squamous cell carcinoma (Ibsen & Phelan, 2009, p. 52). For a definite diagnosis, an incisional biopsy is performed. In an incisional biopsy, the doctor will remove part or the entire lesion depending on its size and his ability to define the extent of it at this early stage (The Oral Cancer Foundation, 2010). The sample of tissue is then sent to a pathologist who examines the tissue under a microscope to check for abnormal or malignant cells (The Oral Cancer Foundation , 2010). This is only taken if the doctor finds any areas that are suspicious (The Oral Cancer Foundation, 2010). Treatment of oral cancer involves multidisciplinary approach involving the efforts of surgeons, radiation oncologists, chemotherapy oncologists, dental practitioners, nutritionists, and rehabilitation and restorative specialists. (The Oral Cancer Foundation, 2010). In addition, treatments may affect other forms of dental disease like caries or soft tissue complications, or even cause bone death (osteonecrosis) (The Oral Cancer Foundation, 2010). During radiation, the patient often experiences mucotitis (Ibsen & Phelan, 2009, p. 305). The mucotitis is painful and appears as erythematous and ulcerated mucosa (Ibsen & Phelan, 2009, p. 305). Difficulty in eating, pain on

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swallowing, and loss of taste can occur as a result of mucositis (lbsen & Phelan, 2009, p. 305). If the radiation affects the major salivary glands, irreversible salivary gland destruction can occur, resulting in severe xerostomia (Ibsen & Phelan, 2009, p. 305). As a result, the patient is more prone to the development of rampant caries and oral candidiasis (Ibsen & Phelan, 2009, p. 305). Chewing or dipping carries risks like: Decay of exposed tooth roots, pulling away of the gums from the teeth, white patches or red sores in the mouth that can turn to cancer. Nearly 37, 000 Americans will be diagnosed with oral or pharyngeal cancer this year. It causes over 8, 000 deaths, killing roughly 1 person per hour, 24 hours per day (The Oral Cancer Foundation , 2010). Hygienists and dentists need to work together with the patient to encourage the patient to guit the use of smokeless tobacco. Consumers of smokeless tobacco should come in routinely to see the dentist to be screen for oral cancer. Several reasons why one should think about guitting the use of tobacco is because it causes bad breath, gum recession, and mouth sores. There are replacements that can be use such as nicotine gum or nicotine patches instead of smokeless tobacco. References Isben, O. A. C., & Phelan, J. A. (2009) Inflammation and Repair. In C. Sprehe & J. Dolan (Eds.), Oral Pathology for the Dental Hygienist (pp. 33-66 (lbsen & Phelan, 2009)). St. Louis, M: Saunders, an imprint of Elsevier Inc. Nield-Gehrig, J. S., & Willmann, D. E. (2008) Systemic Conditions as Contributing Factors. In J. Goucher, J. Montalbano & K. C. Dietz (Eds.), Foundations of Periodontics for Dental Hygienist (pp. 117-136). Baltimore, MD & Philadephia, PA : Lippincott Williams & Wilkins, a Wolters Kluwer Buisness National Cancer Institute at the National Institutes of Health. (2010). Retrieved from National

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