

Talking with Patients

Oral Cancer

Ricardo Padilla, DDS*
André V. Ritter, DDS, MS

WHAT IS IT?

Oral cancer is a cancer that affects any part of the mouth, such as the jaw bone, oral muscles, the gums, lips, tongue, and/or the cheek. According to the American Cancer Society, over 34,000 Americans are diagnosed with oral cancer every year, with more than 5,000 deaths expected because of this aggressive disease in 2008. Only half of the patients diagnosed with oral cancer survive longer than 5 years.^{1,2}

The most common type of oral cancer is called *squamous cell carcinoma* and affects the sides and undersurface of the tongue as well as the floor of the mouth. Oral cancer also includes metastasis from other organs, cancer of the salivary glands, and lymphomas.¹

The majority of the cases of oral cancer are associated with individuals who smoke, use smokeless tobacco (chewing or snuff), consume excessive alcohol, or are infected with certain types of human papillomavirus (HPV). However, oral cancer can develop in people with no known risk factor(s).

HOW IS ORAL CANCER DIAGNOSED?

The early signs of oral cancer are nonspecific and can include a white, red, or red/white patch; an ulcer that does not heal; oral bleeding; a lump or mass that does not go away; pain that does not subside; altered or lack of sensation of an area of the mouth; and difficulty while eating, talking, swallowing, or moving the tongue. While these symptoms can also be associated with noncancerous changes,² if they last for more than 2 weeks, the patient should have the area checked.

Trained health care professionals including dentists, dental hygienists, dental assistants, and other medical personnel can perform periodic oral examinations to look for early signs that may suggest cancerous growths in the mouth. If a suspicious area is discovered, it should undergo additional evaluation by an oral pathologist, an oral surgeon, or an ENT (Ear, Nose, and Throat) doctor.

The most reliable diagnostic test for oral cancer is a tissue biopsy and subsequent examination of the sample under the microscope by a

pathologist who is familiar with oral cancer. Emerging technologies, such as stains, lights, and brush biopsies are promising but, at their current stage of development, are considered only screening tools at best, not definitive diagnostic tests.

An example of an early cancerous lesion is shown in Figure 1. The patient was unaware of the irregular lesion at the lateral/ventral tongue, which was identified by a dentist upon periodic examination. A biopsy confirmed it to be a precancerous condition known as epithelial dysplasia. The lesion was removed surgically, and the patient healed uneventfully and is free of recurrence 5 years after treatment. If this lesion had not been diagnosed and removed, it most likely would have progressed into oral cancer.

HOW IS ORAL CANCER TREATED?

The treatment of oral cancer is dependent on the size, extent, and location of the tumor. This is known as *disease stage* and varies according to the specific location of the lesion, the presence of regional spread, and evidence of metastasis. The typical treatment relies on surgery, radiation therapy,

*Clinical Assistant Professor, Graduate Program Director, Department of Diagnostic Sciences & General Dentistry, University of North Carolina at Chapel Hill School of Dentistry, Chapel Hill, NC, USA



Figure 1. Irregular leukoplakia of the lateral/ventral tongue, identified by a dentist during routine oral examination. Biopsy revealed a precancerous condition known as epithelial dysplasia. The lesion was removed surgically, and the patient healed uneventfully and is free of recurrence 5 years after treatment.

chemotherapy, or a combination of these. New approaches to cancer treatment are being researched and include immune system alteration, hormone-receptor modification, blood vessel disruption, and gene-based therapy. The best treatment for each patient is usually determined by a multispecialty advisory group of health care professionals.

The prognosis of oral cancer is generally dependent on the extent of the disease at the time it is discovered and treated. The more advanced the cancer, the worst is

the prognosis and the higher the likelihood of it having spread to other distant body sites (metastasis). Therefore, screening for early detection and diagnosis is extremely important, as with all other types of cancer.

HOW IS ORAL CANCER PREVENTED?

Oral cancer can be prevented by avoiding all tobacco and alcohol products, eating a balanced diet rich in fruits and vegetables, using sunblock lip balm, using

vitamin A derivatives, and possibly by getting vaccinated against certain strands of HPV. Despite these measures, some individuals still develop oral cancer, which is potentially explained because of genetic abnormalities or unknown risk factors. Therefore, it is important to undergo periodic and comprehensive oral examinations by a trained oral health professional in order to detect any potentially cancerous change in the mouth, and institute prompt and appropriate management.

DISCLOSURE

The authors do not have any financial interest in the manufacturers whose materials are discussed in this article.

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