

Reference as: American Cancer Society. 2000. Oral cavity and oropharyngeal cancer.

ORAL CAVITY & OROPHARYNGEAL: WHAT IS IT?

In this section of the Oral Cavity and Oropharyngeal Cancer Resource Center, you'll find an introduction to cancer, an overview of oral cavity and oropharyngeal cancer, and related oral cavity and oropharyngeal cancer statistics.

WHAT IS ORAL CAVITY AND OROPHARYNGEAL CANCER?

Oral cancer is cancer that starts in the *oral cavity* (mouth). The oral cavity starts at the skin edge of the lips. It includes the lips, the *buccal mucosa* (inside lining of the lips and cheeks), the teeth, the gums, the front two-thirds of the tongue, the floor of the mouth below the tongue, the *hard palate* (bony roof of the mouth), and the *retromolar trigone* (area behind the wisdom teeth).

Oropharyngeal cancer develops in the *oropharynx* (the part of the throat just behind the mouth). The oropharynx begins where the oral cavity stops. It includes the *base of tongue* (back third of the tongue), the *soft palate*, the *tonsillar area* (tonsils and tonsillar pillars), and the *posterior pharyngeal wall* (back wall of the throat).

The oral cavity and oropharynx assist with breathing, talking, eating, chewing, and swallowing. *Minor salivary glands* located throughout the oral cavity and oropharynx make saliva that keeps the mouth moist and helps digest food.

The oral cavity and oropharynx contain several types of tissue and each of these tissues contains several types of cells. Different cancers can develop from each kind of cell. The differences are important, because they influence the patient's treatment options and outlook for recovery.

Many types of tumors can develop in the oral cavity and oropharynx. Some of these tumors are *benign*, or noncancerous. They do not invade other tissues and do not spread to other parts of the body. Others are cancerous, which means they can penetrate into surrounding tissues and spread to other parts of the body. There are also some growths that start off harmless, but sometimes develop into cancer. These are known as *precancerous* conditions.

Benign oral cavity and oropharyngeal tumors

Benign tumors and tumor-like conditions include eosinophilic granuloma, fibroma, granular cell tumor, keratocanthoma, leiomyoma, osteochondroma, lipoma, schwannoma, neurofibroma, papilloma, condyloma acuminatum, verruciform xanthoma, pyogenic granuloma, and rhabdomyoma, as well as odontogenic tumors. The usual treatment for these conditions is surgical removal. Recurrence is very unlikely.

Leukoplakia, erythroplakia, and dysplasia

Leukoplakia and *erythroplakia* are terms that describe an abnormal area in the mouth or throat. Leukoplakia is a white area on the mucosa. Erythroplakia is a slightly raised, red area that bleeds easily, if scraped. The seriousness of leukoplakia or erythroplakia in each person can be accurately determined only by a *biopsy*, a sampling of tissue for examination

under the microscope. These white or red areas may be a cancer, *dysplasia* (a precancerous condition) or some relatively harmless condition. There are mild, moderate, and severe forms of dysplasia. There are based on how abnormal the tissue appears under the microscope and, in turn, help predict how likely the abnormality is to progress to cancer or to go away on its own or after treatment. Often dysplasia will go away if the factor that causes it is eliminated. The most frequent causes of these conditions are smoking or chewing tobacco. Poorly fitting dentures rubbing against the mucosa and irritating it also can cause leukoplakia or erythroplakia. Treatment with *retinoids* (drugs related to vitamin A) can help eliminate some areas of dysplasia or prevent others from forming.

Most of the time, leukoplakia is the result of a benign condition that is very unlikely to develop into cancer. About 5% of leukoplakias, however, are either cancerous when first found or are precancerous changes that progress to cancer within 10 years if not properly treated. Erythroplakia is usually more serious in as much as 51% of these non-specific red lesions are diagnosed as cancer at the time of initial biopsy.

Malignant oral cavity and oropharyngeal tumors

More than 90% of cancers of the oral cavity and oropharynx are *squamous cell carcinoma*, also called squamous cell cancer. Squamous cells are flat, scale-like cells that normally form the lining of the oral cavity and oropharynx. Squamous cell cancer begins as a collection of abnormal squamous cells. The earliest form of squamous cell cancer is called *carcinoma in situ*, meaning that the cancer cells are present only in the lining layer of cells called the *epithelium*. *Invasive squamous cell cancer* means that the cancer cells have spread beyond this layer into deeper layers of the oral cavity or oropharynx.

Verrucous carcinoma is a type of squamous cell carcinoma that makes up less than 5% of all oral cavity tumors. It is a low-grade cancer that metastasizes rarely but can deeply spread into surrounding tissue. Therefore, surgical removal of the tumor with a wide margin of surrounding tissue is advised.

Minor salivary gland cancers can develop in the minor salivary glands that are found throughout the mucosal lining of the oral cavity and oropharynx. There are several types of minor salivary gland cancers, including adenoid cystic carcinoma, mucoepidermoid carcinoma, and polymorphous low-grade adenocarcinoma. For more information about these cancers and benign salivary gland tumors, refer to the American Cancer Society document on salivary gland cancer.

The tonsils and base of tongue contain *lymphoid* (immune system) tissue that can develop into a cancer. For more information about these cancers refer to the American Cancer Society documents on adult non-Hodgkin's lymphoma, childhood non-Hodgkin's lymphoma, and Hodgkin's disease.

The treatment and *prognosis* (outlook for cure) for minor salivary gland cancers and lymphomas are different from that of squamous cell carcinoma and are not discussed in this document. The information contained in the rest of this document about oral cavity and oropharyngeal cancer refers only to squamous cell carcinoma.

WHAT ARE THE KEY STATISTICS ABOUT ORAL CAVITY AND OROPHARYNGEAL CANCER?

The American Cancer Society estimates about 30,200 new cases (20,000 in men and 10,000 in women) of oral cavity and pharyngeal cancer will be diagnosed in the United States during 2000. An estimated 7,800 people (5,100 men and 2,700 women) will die of oral cavity and oropharynx cancer in 2000. Death rates have been decreasing since the early 1980s. 82% of oral cavity and pharyngeal cancer patients survive at least one year after diagnosis. For all stages combined, the 5-year survival rate is 53% and the 10-year survival is rate 43%.

When patients newly diagnosed with oral and oropharynx cancers are carefully examined, about 15% will have another cancer in nearby areas such as the larynx (voice box), esophagus (the part of the digestive system between the throat and stomach), or lung. Another 10% to 40% will develop cancer of one of these organs or a second cancer of the oral cavity or oropharynx at a later time. For this reason, it is very important for patients with oral and oropharyngeal cancer to have follow-up examinations for the rest of their lives and avoid risk factors, like smoking and drinking, which increase the risk for these second cancers.

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