It will cause over 8,000 deaths, killing roughly 1 person per hour, 24 hours per day. Of those newly diagnosed individuals, only slightly more than half will be alive in 5 years (Approximately 57%). This is a number which has not significantly improved in decades. The death rate for oral cancer is higher than that of cancers which we hear about routinely such as cervical cancer, Hodgkin's lymphoma, laryngeal cancer, cancer of the testes, and endocrine system cancers such as thyroid, or skin cancer (malignant melanoma).

Oral cancer (carcinoma) is part of a group of cancers called head and neck cancers. Oral cancer can develop in any part of the oral cavity or upper throat (oropharynx). Most oral cancers begin in tongue, upper throat, and in the floor of the mouth. Almost all oral cancers begin in the cells (squamous cells) that cover the surfaces of the mouth, tongue, and lips. These cancers are known as squamous cell carcinomas. Other forms of cancer can develop in these same tissues, and additionally in bone of the upper or lower jaws and adjacent facial bones. Other tissue types (bone, blood vessels, lymphatic tissue, connective tissue, nerves, salivary glands) can also give rise to forms of oral cancer.

Oral cancers are generally locally invasive and will destroy the tissues they occupy as they grow. It is this destruction or distortion that creates onset of symptoms. When oral cancer spreads to distant areas (metastasizes), it usually travels through the lymphatic system. The cancer cells often appear first in nearby lymph nodes in the neck. Cancer cells can also spread to other parts of the neck, the lungs, and other parts of the body. Historically the death rate associated with oral and pharyngeal cancer is particularly high. This is not because it is hard to discover or diagnose, but due to late discovery in its development. This late discovery tendency is still true. Fortunately, the majority of oral cancers can be readily detected in early stages by doctors who examine the mouth and neck carefully. This should be part of every examination performed by your dentist when you are seen for semi-annual or yearly visits.

RISK FACTORS

Understanding the risk factors of oral cancer will contribute to prevention of the disease in most cases. Risk factors commonly associated with the development of oral and pharyngeal cancer are: age over 40 (although risk of cancer associated with human papilloma virus HPV16 is affecting an increasingly numbers of patients under the age of 40), tobacco use, alcohol consumption, and persistent viral infections such as human papilloma virus. Historically at least 75% of those diagnosed at age 50 and older are tobacco users. This percentage is now changing, and exact percentages are yet to be definitively determined and published, as new data related to viral causes are changing the demographics vary rapidly. When you combine tobacco with heavy use of alcohol, your risk is significantly increased, as the two act synergistically. Those who both smoke and drink, have a 15 times greater risk of developing oral cancer than others. The human papilloma virus (nearly 200 strains have been identified), particularly HPV16, has been definitively implicated in oral cancers, particularly those that occur in the back of the mouth. (Oropharynx, base of tongue, tonsillar pillars and crypt, as well as the tonsils themselves.) HPV is a common, sexually transmitted virus, which infects about 40 million Americans today. An immunization for the human papilloma virus is available. It does not appear that the HPV16 virus acts synergistically with tobacco or alcohol, but represents a completely unique and independent disease process. There are other minor risk factors which have been associated with oral cancers, but have not yet been definitively shown to participate in their development. One such factor could possibly be oral lichen planus, an inflammatory disease of the oral soft tissues, and genetic predispositions.

There are physical factors such as exposure to ultraviolet radiation. This is a causative agent in cancers of the lip, as well as other skin cancers. Cancer of the lip is one oral cancer whose numbers have declined in the last few decades. This is likely due to the increased awareness of the damaging effects of prolonged exposure to sunlight, and the use of sunscreens for protection. Another physical factor is exposure to x-rays. Radiographs regularly taken during examinations, and at the dental office, are safe, but remember that radiation exposure is accumulative over a lifetime. It has been implicated in several head and neck cancers.

SIGNS & SYMPTOMS

Early lesions can be difficult for the patient to detect, and can easily be overlooked as there is seldom pain or discomfort associated. They often present themselves as white or mixed red and white changes in the color of the affected tissues (which are normally some variant of pink). Any ulcer or wound that does not heal within 14 days should be evaluated. Other symptoms include; a lump or mass which can be felt inside the mouth or neck, pain or difficulty in swallowing, speaking, or chewing, any wart like masses, hoarseness which lasts for a long time, or any numbness in the oral/facial region. Unilateral persistent ear ache can also be a warning sign.

DIAGNOSIS

After the physical examination of your mouth, if your doctor finds any areas that are suspicious, he or she may recommend a biopsy. This is simply taking a small portion of the suspicious tissue for examination under a microscope. Most oral lesions allow for a small incisional biopsy, one that can be performed while the patient is conscious. Local anesthesia is adequate in most cases. For lesions or tumors in deeper tissues or less accessible areas, a general anesthetic can provide a better opportunity to perform the biopsy and also to make a full clinical assessment of the lesion.

Following a biopsy confirmation of the presence of an oral cancer, a patient undergoes a complete regional evaluation and a thorough assessment of their overall health, and the state of their disease. This can include CT, MRI, or PET scan imaging. Additional evaluations of the deeper aspect of the throat, nasal and sinus cavity, and upper pharynx (nasopharynx) may be necessary. Older patients may be suffering from other illnesses, and they are also at risk of having other cancers in the respiratory or digestive tract. These "synchronous carcinomas" of the head and neck, lungs, or esophagus occur as frequently as 10 percent of the time with elderly oral cancer patients. Therefore, checking for cancer in these areas as well, can be part of the diagnostic process.

TREATMENT

After a definitive diagnosis has been made and the cancer has been staged, treatment may begin. Treatment of oral cancers is ideally a multidisciplinary approach involving the efforts of surgeons, radiation oncologists, chemotherapy oncologists, dental practitioners, nutritionists, and rehabilitation and restorative specialists. The actual curative treatment modalities are usually surgery and radiation, with chemotherapy added to decrease the possibility of metastasis, to sensitize the malignant cells to radiation, or for those patients who have confirmed distant metastasis of the disease. Although protocols have been established for treatment of various types and stages of oral cancer, each patient will need treatment that is customized for their case.