

Oral Cancer

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Key points

- Oral cancer is a serious health issue worldwide
- Tobacco use the leading cause of oral cancer
- Human papillomavirus (HPV) risk factor for oral cancer
- Symptoms of oral cancer depending on the location and stage of the cancer
- Physical examination, biopsy and various imaging techniques for diagnosis
- Treatment modalities include surgery, radiation therapy, chemotherapy

Oral cancer is a serious health issue worldwide. It is a type of cancer that starts in the mouth, lips, tongue, gums, salivary glands, and tonsils. According to the American Cancer Society, about 54,000 people in the United States were diagnosed with oral cancer in 2021, and around 10,850 people died from the disease.¹ Early detection of oral cancer can improve the chances of successful treatment. In this article, we will explore oral cancer, including its causes, symptoms, diagnosis, treatment, and prevention.

Causes of oral cancer

Tobacco use, including smoking and chewing tobacco, is the leading cause of oral cancer. According to the National Cancer Institute, people who smoke cigarettes are six times more likely to develop oral cancer than non-smokers. Chewing tobacco and snuff are also linked to oral cancer, especially in people who use these products for many years.²

Alcohol use is another risk factor for oral cancer. Heavy alcohol use can increase the risk of oral cancer, especially in people who also use tobacco products. According to the American Cancer Society, people who drink alcohol and smoke tobacco are 15 times more likely to develop oral cancer than those who do not use these products.

Human papillomavirus (HPV) infection is also a risk factor for oral cancer. According to the Centre for Disease Control and Prevention, about 70% of oropharyngeal cancers (cancers of the back of the throat, including the tonsils and base of the tongue) are caused by HPV. Other risk factors for oral cancer include poor oral hygiene, exposure to sunlight, a weakened immune system, and a family history of cancer.

Symptoms of oral cancer

The symptoms of oral cancer can vary depending on the

location and stage of the cancer. Some common symptoms of oral cancer include:

1. A sore in the mouth that does not heal
2. A lump or thickening in the cheek
3. White or red patches on the gums, tongue, or lining of the mouth
4. Pain or difficulty swallowing
5. Pain in the ear
6. Numbness in the mouth or lips
7. Loose teeth
8. A change in voice or speech
9. A feeling that something is caught in the throat³

Diagnosis of oral cancer

If oral cancer is suspected, a doctor or dentist may perform a physical exam of the mouth, throat, and neck. The doctor may also order imaging tests, such as X-rays, CT scans, or MRI scans, to look for signs of cancer. A biopsy may also be performed to confirm the diagnosis. During a biopsy, a small piece of tissue is removed from the mouth or throat and examined under a microscope.

Stages of oral cancer

The stages of oral cancer are based on the size of the tumour, whether the cancer has spread to nearby lymph nodes or other parts of the body, and other factors.

Stage 0:

At this stage, the cancer is only in the surface layer of the mouth and has not spread to deeper tissues or nearby lymph nodes. Treatment options for stage 0 oral cancer may include surgery, radiation therapy, or a combination of the two.

Stage I:

At stage I, the tumour is less than 2 centimetres in size and has not spread to nearby lymph nodes. Treatment options for stage I oral cancer may include surgery, radiation therapy, or a combination of the two.

Stage II:

At stage II, the tumour is between 2 and 4 centimetres in size and has not spread to nearby lymph nodes. Treatment options for stage II oral cancer may include surgery, radiation therapy, or a combination of the two.

Stage III:

At stage III, the tumour is larger than 4 centimetres in size and may have spread to nearby lymph nodes. Treatment options for stage III oral cancer may include surgery, radiation therapy, or a combination of the two.

Stage IV is divided into two subcategories: IVA and IVB.

Stage IVA:

At stage IVA, the tumour may be any size and may have spread to nearby lymph nodes or other parts of the body. Treatment options for stage IVA oral cancer may include surgery, radiation therapy, chemotherapy, or a combination of the three.

Stage IVB:

At stage IVB, the cancer has spread to other parts of the body, such as the lungs or liver. Treatment options for stage IVB oral cancer may include palliative care to manage symptoms and improve quality of life.

In conclusion, the stages of oral cancer can help determine the severity of the cancer and guide treatment options. Early detection and treatment are crucial for improving the chances of a successful outcome. It is important for individuals to be aware of the signs and symptoms of oral cancer and to undergo regular oral cancer screenings. 4

Treatment of oral cancer

The treatment for oral cancer depends on the location and stage of the cancer. Surgery, radiation therapy, and chemotherapy are the most common treatments for oral cancer. In some cases, a combination of treatments may be used. Surgery may involve removing the cancerous tissue, nearby lymph nodes, and parts of the jaw or tongue. Radiation therapy uses high-energy X-rays to kill cancer cells. Chemotherapy uses drugs to kill cancer cells. 5

Prevention of oral cancer:

There are several ways to reduce the risk of oral cancer, including:

1. Avoiding tobacco use: Quitting smoking and avoiding other tobacco products can greatly reduce the risk of

oral cancer.

2. Limiting alcohol consumption: Reducing alcohol consumption can also lower the risk of oral cancer.
3. Protecting against HPV: Getting the HPV vaccine and practicing safe sex can help reduce the risk of HPV-related oral cancer.
4. Protecting against sun exposure: Wearing a hat and lip balm with sunscreen can help protect against lip cancer.
5. Eating a healthy diet: Eating a diet rich in fruits and vegetables can help reduce the risk of oral cancer.

Conclusion

Oral cancer is a serious condition that can have a significant impact on a person's health and quality of life. Early detection and treatment are crucial for improving the chances of a successful outcome. By taking steps to reduce the risk of oral cancer, such as avoiding tobacco use and protecting against sun exposure, individuals can take an active role in protecting their health.

References

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