

Oral Cancer: Early Detection and Prevention Strategies

Pandora Motley*

Department of Health Sciences, Saitama Prefectural University, Saitama, Japan

Short Communication

Received: 28-Aug-2024, Manuscript No. JDS-24-149053; **Editor assigned:** 02-Aug-2024, PreQC No. JDS-24-149053 (PQ); **Reviewed:** 14-Sep-2024, QC No. JDS-24-149053; **Revised:** 23-Sep-2024, Manuscript No. JDS-24-149053 (R); **Published:** 30-Sep-2024, DOI: 10.4172/2320-7949.12.3.005

***For Correspondence:**

Pandora Motley, Department of Health Sciences, Saitama Prefectural University, Saitama, Japan

E-mail: pandoramotley23@gmail.com

Citation: Motley P, Evaluating their Role in Enhancing Treatment Precision and Patient Outcomes. RRJ Dental Sci. 2024;12:005

Copyright: © 2024 Motley P. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

ABOUT THE STUDY

Oral cancer, which includes cancers of the lips, tongue, cheeks, floor of the mouth, and throat, is a significant global health concern. Despite its potential to be life-threatening, early detection and preventative measures can drastically improve survival rates. This article analyse the causes, symptoms, and strategies for early detection and prevention of oral cancer, empowering individuals to take proactive steps toward protecting their health.

Oral cancer falls under the category of head and neck cancers and is primarily found in the squamous cells that line the mouth and throat. According to the World Health Organization (WHO), oral cancer ranks among the top 20 most common cancers worldwide, with tobacco and alcohol use being two of the leading risk factors. In recent years, the Human Papillomavirus (HPV) has emerged as another significant cause, particularly for cancers in the oropharynx, which includes parts of the throat and back of the mouth.

Risk factors for oral cancer

Tobacco use: Smoking cigarettes, cigars, or pipes, as well as chewing tobacco, significantly increases the risk of oral cancer. Smokers are several times more likely to develop the disease compared to non-smokers.

Excessive alcohol consumption: Heavy drinking can damage the cells of the mouth, making them more vulnerable to cancerous changes. The combined use of alcohol and tobacco raises the risk even higher

HPV infection: HPV, particularly HPV-16, has been linked to a rising number of oropharyngeal cancers. Unlike other types of oral cancer, HPV-related cases often affect younger, non-smoking individuals ^[1].

Diet and nutrition: A diet lacking in fruits and vegetables may lower a person's resistance to oral cancer. Nutrient-rich foods that support immune health can play a role in reducing risk ^[2].

Symptoms of oral cancer

Early detection of oral cancer can significantly increase the chances of successful treatment. Therefore, it's critical to be aware of the signs and symptoms that may indicate the presence of the disease:

- Persistent sores or ulcers in the mouth that do not heal after two weeks.
- Red or white patches in the mouth.
- Lumps or thickened areas in the cheek, tongue, or gums.
- Difficulty swallowing or persistent throat pain.
- Numbness or pain in the mouth or tongue.
- Changes in voice or unexplained hoarseness.
- Chronic ear pain without infection.

If any of these symptoms persist, individuals should seek immediate dental or medical attention for further evaluation.

Early Detection of oral cancer

One of the most effective ways to detect oral cancer early is through routine dental check-ups. Dentists and dental hygienists are trained to examine the mouth for signs of cancer during regular appointments. They can identify abnormal tissue changes, such as lesions, growths, or color changes that may indicate the presence of precancerous or cancerous cells. Oral cancer screenings are non-invasive and often take only a few minutes. During the examination, the dentist will visually inspect the entire mouth and use palpation to feel for lumps or abnormalities. Some dental offices may also use special lights or dyes to detect unusual cells ^[3-6].

Prevention strategies for oral cancer

While not all cases of oral cancer can be prevented, several strategies can significantly reduce the risk

Avoid tobacco: Quitting smoking or avoiding the use of chewing tobacco is one of the most effective ways to lower the risk of oral cancer ^[7-9].

Limit alcohol consumption: Reducing alcohol intake can help protect the cells in the mouth from damage and reduce cancer risk ^[10].

HPV vaccination: The HPV vaccine has been shown to prevent HPV-related oral and oropharyngeal cancers, making vaccination an important preventative measure for eligible individuals ^[11].

Maintain a healthy diet: A diet rich in fruits and vegetables, particularly those high in antioxidants, can support oral health and potentially lower cancer risk.

CONCLUSION

Oral cancer is a serious but often preventable disease. By understanding the risk factors and recognizing the symptoms, individuals can take proactive steps toward early detection and prevention. Regular dental check-ups, combined with healthy lifestyle choices, including quitting tobacco, moderating alcohol intake and considering HPV vaccination, can greatly reduce the risk of oral cancer. Early detection remains the most critical factor in improving treatment outcomes and survival rates, making routine oral health screenings an essential part of maintaining overall well-being.

REFERENCES

1. Zeitoun IM, et al. Cervical cellulitis and mediastinitis caused by odontogenic infection. Report of two cases and review of literature. *J Oral Maxillofac Surg.* 1995;53:203-208.
2. Azaz B, et al. Pathoses of coronoid process as a cause of mouth opening restrictions. *Oral Surg Oral Med Oral Pathol.* 1994;77:579-584.
3. Trumpy IG, et al. Temporomandibular joint dysfunction and facial pain caused by neoplasms. *Oral Surg Oral Med Oral Pathol.* 1993;76:149-152.
4. Cunningham PA, et al. Trismus as a result of metoclopramide therapy. *J Irish Dental Assoc.* 1988;34:128-129.
5. Sheiham A, et al. Evaluation of social and psychological factors in periodontal disease. *Periodontol* 2000. 2005;39:118-131.
6. Suvan JE, et al. Behavioral strategies for periodontal health. *Periodontol* 2000. 2022;90:247-261.
7. Baumeister SE, et al. Understanding the consequences of educational inequalities on periodontitis: Mendelian randomization study. *J Clin Periodontol.* 2021;49:200-209
8. Baumeister SE, et al. Cannabis use and the risk of periodontitis: A two-sample mendelian randomization study. *J Clin Periodontol.* 2022;49:654-661.
9. Baumeister SE, et al. Testing the association between tobacco smoking, alcohol consumption, and risk of periodontitis: A mendelian randomization study. *J Clin Periodontol.* 2021;48:1414-1420.
10. Saravanan S, et al. In silico identification of human miR 3654 and its targets revealed its involvement in prostate cancer progression. *Microna.* 2016;5:140–145.
11. Yuan X, et al. GAS5 alleviates cisplatin drug resistance in oral squamous cell carcinoma by sponging miR-196a. *J Int Med Res.* 2022;50:3000605221132456.