Journal of Research in Biology

An International Scientific Research Journal

Etiology, risk factors and recent advances in molecular pathogenesis of oral cancer: a mini-review

Authors:

Sridhar Reddy Erugula¹, Deepika Veldurthi¹, RupaRani Bodduru¹, Divya Jahagirdar², Ravipati Pranathi³ and Gude Venkata Naga Sai Pratap⁴

Institution:

1. MNR Dental College and Hospital, Sanga Reddy, Telangana.

2. Dr. Sreerama Murthy's Dental Clinic, Hyderabad, Telangana.

3. Malla Reddy Dental College for Women, Hyderabad, Telangana.

4. Asian Speciality Dental Hospital, Hyderabad, Telangana.

Corresponding author: Sridhar Reddy Erugula

ABSTRACT:

Oral cancer is a cancer which arises from the lining of the lips, buccal cavity and oro-pharynx. It usually starts as a painless patch and progresses into a nodule or nodulo-proliferative growth. It is most commonly seen in people who are smokers, alcoholics and beetle nut or gutka chewers. Diagnosis is made by tissue biopsy of the concerning area, followed by investigation with Computerized Tomography (CT) scan, Magnetic Resonant Imaging (MRI) and Positron Emission Tomography (PET) examination to determine if it has spread to distant parts of the body. There are no hundred percent cures for the oral cancer, but there is hundred percent prevention of oral cancer by restricting tobacco and alcohol use. Human papilloma vaccination of risky individuals etc., There are many treatments available for oral cancers which include chemotherapy, and radiation therapy, wide local excision of the lesion and adjuvant chemotherapy. All these treatments are unique and depend on the size and location of the lesion and overall health status of the patient. In this review article, the authors have traced etiology, risk factors and recent advances in the molecular pathogenesis of oral cancer.

Keywords:

Oral cancer, Squamous cell carcinoma, Head and neck, Smoking, Alcohol.