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Global Strategies & Innovative Techniques to Tackle Infectious Diseases, Prevention & Control

HPV GENOTYPES DETECTION IN THE SALIVA SAMPLES OF HIV SERO-POSITIVE PATIENTS

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ABSTRACT:

Aim: To detect presence of HPV genotypes in the saliva samples of HIV sero-positive patients.

Objectives:

1) To detect presence HPV genotypes in the saliva samples of HIV sero-positive patients.

2) To detect presence of any oral lesions or oral cancers in the oral cavity of these HIV sero-positive patients.

3) To evaluate if there is any co-relation between the HPV genotypes if present & oral lesions or oral cancers is present in the oral cavity.

Introduction:

Human papilloma virus (HPV) is a small circular double stranded DNA virus which has been implicated in a variety of benign and malignant neoplasias in human oral and anogenital regions[4,5]. About 100 different HPV genotypes have been identified and classified as either low-risk or high-risk oncogenic types, based on their ability to induce neoplasia in host epithelial cells. Most prevalent high-risk types are HPV 16 and 18[1], which have been detected in the majority of malignant lesions worldwide. Low-risk types such as HPV 6 and 11 are most often associated with benign lesions[6,7]. Several epidemiological and molecular studies have suggested a significant link between high-risk HPV types (mainly 16 and 18) and oral cancer. Recent evidence has indicated that HPV-related pathology is increased in the oral cavity of human

immunodeficiency virus (HIV)-positive individuals. HPV types are known to be seen more in HIV-positive patients, as they are immune-deficient. HPV in saliva of HIV-positive individuals may be associated with high risk for development of HPV-related oral lesions, including malignancy[3,2].

Methods: To detect the presence of HPV in HIV–positive patients, 30 saliva samples of Sex-workers from red-light street areas in Pune were collected & DNA sequences carried out by polymerase chain reaction (PCR).

Results: The results obtained were negative for HPV in the 30 saliva samples. Thus, indicating that more sample size should be considered for detection of HPV in HIV sero-positive patients for detection of HPV in saliva samples.

Conclusion: This is a non-invasive & prognostic type of study, the results of which will defiantly help in screening, early detection & prevention of HPV related oral cancers in immune-compromised HIV patients by using saliva samples.

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numerous National & International publications to her credit & has also published 02 International Books. She has been invited as GUEST SPEAKER to 06 National Conferences & 04 International Conferences. She has presented 04 YouTube Webinars. She has presented Papers & Posters at National & International Conferences & has won 3rd Prize for Best Scientific Paper Presentation at International Conference on Forensic Odontology (IASR) 2021 & 2nd Prize for Best Scientific Poster Presentation at International Conference on Oral Health & Dentistry 2021. She has been Chairperson for National & International Scientific Events. She has also been invited as a Panellist for National Scientific Event on Oral Cancer Advanced Diagnostics 2021.