

4th World Congress on Virology

October 06-08, 2014 Hilton San Antonio Airport, TX, USA

Frequency of oral lesions with human papilloma virus and its genotypes in tobacco chewers: A cross sectional study

Zil-e-Rubab

Ziauddin University, Pakistan

Background: The human papillomavirus (HPV) has been evolved as a new culprit of malignant and pre malignant oral lesions of tobacco chewers in several studies. Taking into account this role of HPV in oral mucosa, the objective of this study was to detect the presence of HPV and its genotypes 16, 18 in different lesions of oral cavity of tobacco chewers.

Methods: A 15-30 ml of buccal wash sample was collected from 522 subjects (440 males and 82 females) with leukoplakia, erythroplakia, submucous fibrosis and oral squamous cell carcinoma after an informed consent. Gentle brushings from the lesions were taken from subjects with the help of a brush at the other end of dental floss and the buccal wash was stored at 4°C until DNA extraction. DNA was extracted and PCR was performed using HPV consensus primers Gp5+/Gp6+. The genotyping for HPV 16, 18 was performed using HPV 16, 18 specific primers.

Results: The 84% (440/522) of males were affected by oral premalignant lesions whereas, submucous fibrosis was found to be the most frequent pre malignant oral lesion (192) out of total 522 cases. Out of 192 SMF cases, 82 were HPV positive with 91% (75) males and 9% (7) females. In SMF, 74% (61) have genotypes other than HPV 16 and 18. HPV 16 and 18 were frequent in 20 patients with OSCC. HPV 18 was frequent genotype in patients with erythroplakia in this study.

Conclusion: The patients with SMF are at greater risk of having HPV. HPV 16 and 18 were more frequent malignant genotypes but the possibility of other HPV genotypes causing pre malignant and malignant lesions requires further investigation.

zile_rubab@hotmail.com