Low Concordance of Oral and Genital HPV Infection among Male Patients with Sexually Transmitted Infections in Vietnam

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Human papillomavirus (HPV) causes cancers in men, including penile, anal, and oropharyngeal cancers. This cross-sectional study aimed to investigate the prevalence, and the genotypes of HPV infections in the oral cavity, compared to those in the genitals, among males diagnosed with sexually transmitted infections (STIs) in Vietnam. Oral, urinary, penile, and urethral samples were collected from 198 male Vietnamese patients with STIs (median age 31.0 years, range 17–68). HPV DNA was isolated and amplified with PCR, with modified and/or original GP5+/GP6+ primers. Samples were genotyped with a gene array assay and/or population sequencing. HPV DNA was detected in 69 (34.8%) of 198 patients. Of these, 16 patients (8.1%) had infections in the oral cavity and 58 (29.3%) had infections in the genitals (4.5% in the urine, 25.8% in the penis, and 8.1% in the urethra). The concordance of HPV infections between the oral cavity and the genitals was poor (kappa = 0.01). Of the 16 patients with oral HPV DNA, 11 (68.8%) had no HPV DNA in the genitals. In the remaining five patients, HPV DNA was found at both sites, but only one showed similar strains at both sites. In the other four patients, the HPV genotypes were completely discordant between these sites. HPV18 was the most common high-risk HPV genotype in both oral (9/16, 56.3%) and genital (10/58, 17.2%) sites. The low concordance of HPV genotypes between oral and genital infection sites suggested that the acquisition, persistence, and/or clearance of HPV infections were different between these sites.

Biography:

Dr. Hiroshi Ichimura serves as the Dean of Kanazawa University Graduate School of Advanced Preventive Medical Sciences. He graduated from Yamaguchi University School of Medicine in 1980, obtained a Ph.D. from Tottori University, Japan, and did his post-doctoral training at Baylor College of Medicine, Texas in 1985–1987, and at the University of California, San Francisco, in 1991–1992. He became the Professor of Department of Viral Infection and International Health, Graduate School of Medical Sciences, Kanazawa University in 1999. He has studies viral infectious diseases, such as HIV/AIDS, human papilloma virus, and hepatitis viruses in Kenya and Vietnam.