



Review Article

Twenty Years of Oral HIV Research Experience in Thailand: Where Are We Now?

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Abstract

Acquired immune deficiency syndrome (AIDS) caused by human immunodeficiency virus (HIV) infection is a global health problem. Because immune cells are the target of HIV infection, the immunity of the host is compromised after being infected with the virus leading to the development of various opportunistic infections and malignancies. HIV infection affects not only systemic immunity, but also the local innate immune defense. As oral health is an integral part of general health, various oral lesions have been observed in HIV-infected individuals. Oral candidiasis is the most common opportunistic infection found in this patient group followed by hairy leukoplakia. After the introduction of highly active antiretroviral therapy (HAART), a standard treatment for HIV infection, prevalence of HIV-related oral lesions has dramatically declined. However, long-term use of HAART causes adverse effects on oral health and significantly affects oral innate immunity of HIV-infected individuals. Thus, it should be noted that even when oral lesions are not seen clinically in those on HAART, subclinical alterations of oral epithelium do occur as marked by changes in the expression of cytokeratins and innate immune mediators. In addition, decreased salivary flow rates are observed among HIV-infected individuals on HAART. Oral oncogenic virus such as Epstein-Barr virus, but not human papilloma virus, has been shown to be decreased with HAART. This review article described different aspects of research on oral health and disease in HIV/AIDS in Thailand performed by author and colleagues during the last two decades. Future directions of oral HIV research were also included.

Key words: AIDS, Candidiasis, HIV, Innate immunity, Oral lesions, Oral health, Saliva

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