

Abstract

To test the relationship between the cellular immunity and different menstrual cycles and the prevalence of HPV infection in HIV-seropositive women, totally 32 subjects were enrolled. Immunophenotyping of peripheral blood during the follicular and luteal phases was composed of total cell count, lymphocyte count, CD4+, CD8+, and their activating markers including CD25, CD69, HLA-DR, CD28, CD38, etc. Pap smear was performed every 6 months. HPV typing of cervical smear was performed by PCR on various menstrual phases using various primers for HPV. Virus loading was checked on each blood sampling.

Pap smear revealed active inflammatory reaction (class II) in 18 women (56.3%). Fungal infection was most frequent (55.6%, 10/18). The HPV positive rate was 50.0% (16/32) with malignant type and 12.5% (4/32) with benign type. During the follow up, two women with CIS and two with CIN-1 of uterine cervix were noted.

The activating antigens (HLA-DR, CD38) were elevated on CD8+ T cells of these women. All these alterations seemed not related to menstrual cycle. Therefore, we concluded 1) the CD8+ T cells were increased and activated in women with HIV infection and these alterations were not affected by various menstrual cycles, 2) cervical inflammation especially fungal infection was common in these women, and 3) the prevalence of malignant type HPV infection was also high in these women that intensive Pap smear examination is recommended.

Key Word : HPV 、 HIV 、 menstruation 、 cellular immunity