

TITLE: DETECTION OF HUMAN T-LYMPHOTROPIC VIRUS (HTLV) IN VAGINAL SECRETION SAMPLES OF UNIVERSITY STUDENTS

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ABSTRACT:

The human T-lymphotropic virus has a higher prevalence in women than men, increased with age and more efficient sexual transmission from men to women. This study aims to detect HTLV pro-viral DNA in the vaginal secretion sample of university students. Samples were tested by Polymerase Chain Reaction (PCR) and enzymatic digestion for detection of the viral genotype (HTLV-1 or HTLV-2). The investigation of HTLV infection was performed by anti-HTLV antibody analysis, by the ELISA technique, and molecular pro-viral DNA research in blood cells. Of the 193 secretion samples, six presented positivity for HTLV (3.1%), two with HTLV-1 genotype and four HTVL-2. Of the six women with HTLV-positive vaginal secretion samples, contact with three was not possible; Two did not want to take the blood test, and only a 28-year-old student collected blood. Blood samples from this student and her mother did not show anti-HTLV and HTLV pro-viral DNA. Our findings demonstrate the presence of HTLV pro-viral DNA in the vaginal secretion sample of young women without viremia. The absence of a history of blood transfusion and infected mother suggests a possible sexual transmission of the virus, which needs to be better investigated. The virus presence in the woman's vaginal secretion may be from lymphocytes present in the semen of the unproven sexual partner. The study demonstrates that it is possible to identify HTLV in a sample of vaginal secretion by early diagnosis of the infection.

Key words: Infection, Sexual transmission, Vaginal discharge

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