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/INJECTING DRUG USERS/ BLOOD DONORS

RUANGCHAI LOKET: SEROPREVALENCE OF BORNA DISEASE
VIRUS IN SEXUALLY-TRANSMITTED DISEASE PATIENTS AND INJECTING
DRUG USERS. THESIS ADVISORS: LEERA KITTIGUL, Ph.D, WATTANA
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Borna disease virus (BDV) naturally infects horses, sheep, cats, cattle, and ostriches. It causes a central nervous system disease with behavioral abnormalities. A high seroprevalence of anti-BDV was observed in humans with certain mental disorders and human immunodeficiency virus infection. However, there is no data of BDV transmission and thus how to prevent and control this disease remains a serious problem. A cross-sectional study was carried out by using an indirect enzyme-linked immunosorbent assay and Western blotting for the detection of anti-BDV in each of 200 serum samples from sexually-transmitted disease (STD) patients, injecting drug users (IDU) and blood donors (BD). After confirmation by Western blotting, it was found that the anti-BDV prevalence was highest in BD (18%) followed by IDU (15%) and STD patients (9.5%). In each age group, the presence of anti-BDV in sera of the patients was not different. The anti-BDV in male BD was higher than that in female BD with the ratio of 2.66: 1 (p -value, 0.049). In STD patients, only the female had anti-BDV which was significantly different from the male (p -value, 0.004). The prevalence of anti-BDV was quite different among those three groups (p -value, 0.015). In IDU group, the prevalence rate of anti-BDV in the serum samples of HIV-infected patients (12%) was not different from that of non HIV-infected patients (18%) (p -value of 0.235).

The high seroprevalence of anti-BDV in those three groups suggests that the BDV infection might occur generally in Thailand.