SHORT REPORT

ELISA HTLV-III antibody reactivity of Myanmar patients infected with P. falciparum malaria

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A serological survey on 250 out-patients in rural Zaire showed that the prevalence of antibodies against HTLV-I, HTLV-II and HTLV-III as detected by Enzyme-linked-immunosorbent Assay (ELISA) correlated with levels of antibodies against P. falciparum [1].

Simooya et al [2] had also reported the relation between falciparum malaria and HIV seropositivity from Zambia. They suggested that many patients with HIV infection may be presenting with an illness clinically similar to malaria before AIDS related complexes or AIDS is recognisable. Hence this study, the possible association between ELISA HTLV-III antibody reactivity and P. falciparum malaria infection was studied.

73 samples of sera collected from in-patients of Thayarwady Civil Hospital with the following clinical groups were tested for ELISA HTLV-III antibody reactivity.

Group 1 - 30 patients with uncomplicated P. falciparum malaria.
Group 2 - 30 patients with highly parasitised falciparum malaria (more than 5% of RBCs parasitised)
Group 3 - 13 patients with cerebral malaria.

All the samples were freshly collected and frozen at -20°C and sent to National Health Laboratory, Yangon within one month. Antibody reactivity to HTLV-III was tested by a competitive enzyme immunoassay using Wellcome Anti-HTLV-III kit.

All the 73 samples were seronegative for HTLV-III antiboty.

Greenberg et al. [3] found that exposure to plasmodium does not result in HTLV-III/LAV seropositivity and HTLV-III antibodies are not strongly cross-reactive with malaria antigens. Their study was based on serum samples from 460 patients with previous plasmodium infection.

Facer et al. [4] had also screened sera for HTLV-III antibodies from 92 Gambian children under the age of 10. All the children were seronegative for HTLV-III antibody. In addition, 5 adult Caucasians with acute P. falciparum malaria were also seronegative for HTLV-III reactivity.

Nguyen Dinh et al. [5] had reported the absence of association between P. falciparum malaria and human immuno-deficiency virus infection in children from Zaire.

Recently Subramanyam [6] had examined 119 malaria sera from Orissa, all were negative for anti-HTLV-III antibody reactivity.

Hence there may be no association between ELISA HTLV-III antibody reactivity and P. falciparum malaria infection.

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