

A STUDY OF 11W-ANTIBODY IN SERA OF BLOOD DONORS AND PEOPLE AT RISK

Pages with reference to book, From 221 To 222

Syed Abdul Mujeeb, Mir Rehman All Hashmi (Blood Bank, Jinnah Postgraduate Medical Centre, Karachi.)

Human Immuno-deficiency Virus¹, a retro virus² is the causative agent of Aquired ImmunoDefficiency Syndrome³. It is a lymphotropic⁴ as well as a neurotropic⁵ virus, and acts by destroying the T-Helper lymphocytes, thereby leaving the AIDS victim vulnerable to life threatening infections⁶ and malignancies⁷.

Over 10 million⁷ people in 71 countries⁸ including India⁹, Thailand¹⁰ and Hong Kong¹¹ have contracted AIDS Virus. This study reports the presence of AIDS Virus in Karachi.

SUBJECTS, METHODS AND RESULTS

Between November 1986 to November 1987 sera of 1,363 individuals were screened for HIV-antibody, using ELISA technique,¹² in the Blood Bank of Jinnah Postgraduate Medical Centre, Karachi. Eight hundred and eight cases were recipients of unscreened blood, 298 professional, and 225 voluntary blood donors, and 32 homosexual and promiscuous individuals. Sera positive for anti HIV were rechecked and confirmed by Western blots¹³ at National Institute of Health, Islamabad.

Of 1,363 subjects screened 8 (0.6%) were anti-HIV positive. Of the 6 sera tested by Western blot method, 2 were found to be positive, confirming the presence of AIDS virus in these individuals. Both of which cases were married females aged 30 and 45 years, who gave history of receiving multiple transfusions. Both had bilateral cervical lymphadenopathy and associated visceromegaly. One case had biopsy proven metastatic papillary carcinoma of the liver and died a few weeks later. Both the females denied any risk factor attributed to HIV infection. It seems likely that both contracted the disease through transfusion of un screened blood.

Two samples which though, were repeatedly found positive by EUSA but could not be checked on Western blot, belonged to males, one a promiscuous male and the other, a case of carcinoma of anterior nasal fossa. Both the cases were lost to follow up.

(X)MMMENTS

HIV infection is as common among women as in men in the third world countries¹⁴.

Blood could be the most important means of transmission of HIV infection in Pakistan, because unscreened blood from professional donors, who lead a promiscuous life and take narcoitics, is given to patients in public hospitals.

The extent of homosexuality and prostitution in Pakistan is not known, but their possibility in certain areas of the country and places like prisons, remand homes and slum areas cannot be excluded.

Prostitutes of low income group do not observe protective measures and use traditional methods of contraception and abortion which increase the risk of acquiring the infection.

Intravenous drug abuse is not common in the developing world¹⁵ but the use of unsterilized needles and instruments for medical as well as traditional procedures¹⁶ are likely to increase the chances of contracting AIDS.

As the AIDS is still infrequent in this region, it can be kept in check by health authorities providing

screening facilities in blood banks and educating people about the dangers of the disease and methods of protection.

We thank Prof S.H.M. Zaidi and Dr. Jaffar Naqvi for their help in conducting the study and preparation of manuscript, Gen M.I. Burney for confirmation of cases, Abbott laboratories, Mr. Shafique Ahmed, Mr Shujaat Hussain for technical assistance and Mr Shakeel Khan for typing the manuscript.

REFERENCES

1. World Health Organisation Weekly Epidemiological Record, 1986; 30:229.
2. Broders, S and Gallo, R.C. A pathogenic retrovirus (HTLV-III) linked to AIDS. N. Engi. LMed., 1984; 311: 1292.
3. Gallo, R.C. and Wong-Staal, F.A. A human T4ymphotropic retrovirus (HTLV-III) as the cause of the acquired immuno deficiency syndrome. Ann. Intern. Med., 1985; 103:679.
4. Jaap Goudsmit, Deborah, A., Paul, Joep, M.A., Lange et a!. Expression of human immuno deficiency virus antigen (HIV-Ag) in serum and CSF during acute and chronic infection. Lancet, 1986; 2:177.
5. Shaw, G.M., Harper, M.E., Hahn, B.W, et al. HTLV-III infection in brain of children and adults with AIDS encephalopathy.. Science, 1985; 227:177.
6. Vieira, 3., Frank, E., Spira, TJ. and Landesman, S.H Acquired immunodeficiency in Haitians; opportunistic infection, in previously healthy Haitian immigrants. N. EngI. J. Med., 1983; 308:125.
7. Mahler, H. AIDS; a public Health Crisis. Population Reports, 6: 94.
8. Brunet, J.B. and Anceile, R.A. International Occurrence of AIDS. Ann. Intern. Med., 1986; 105: 670.
9. Taya Raman, K.S. Pool of infected women. Nature, 1986; 321:103.
10. World Health Organisation. Thailand Weekly Epidemiological Record, 1986; 61: 163.
11. Chang, R.S., Chan, R.C.K., Frinch, G.L, et al. HTLV ill antibody testing in Hong Kong. JAMA., 1986; 256 :41.
12. WHO Guidelines for the prevention and control of infection with LAV/HTLV III. Geneva, WHO.,1986.
13. Anonymous FDA, Studies on new Confirmatory tests for AIDS. Med. World News, 1986; 27:65.
14. AIDS; the search for clues. WHO Chronical, 1985; 39:207.
15. Clumeck, N., Perre, P.V., Carael, M., Rouvroy, D. and Nzaramba, D. Heterosexual promiscuity among African patients with AIDS. N. Engi. 3. Med., 1985; 313:182.
16. Pape, J.W., Liautaud, B., Thomas, F., Mathurin, J., Amand, M.A., Boncy, M., Pean, V., Pamphile, M., Laroche, A.C., Dehovitz. J. and Johnson, W.O. The acquired immunodeficiency syndrome in Haiti. Ann. Intern. Med., 1985; 103:674.