

HIV INFECTION AMONG PREGNANT WOMEN

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SUMMARY

Serum samples were collected from 400 pregnant women and tested for the presence of antibodies to Human Immuno-deficiency Virus (HIV). Two persons were seropositive by both enzyme Linked Immunosorbent Assay (ELISA) and Western Blot (WB) tests, the positivity rate being 0.5 per cent.

INTRODUCTION

HIV infection shares with its oldest cousin, syphilis, the mode of transmission, prolonged symptomatic phase, unpredictable clinical manifestations of varying severity, affecting every organ system, the predicament of spouses of sexually promiscuous persons and the tragedy of intrauterine transmission. The consequences of intrauterine infection in the foetus might vary depending upon the period of gestation at the time of infection and the severity of infection (prema Ramachandran, 1989). It has been shown that HIV infection will develop in 20% to 50% of the children of infected women (Mok et al,

1987 and Blanche et al, 1987). Currently it is estimated that 7% of patients with AIDS are women of reproductive age (Rogers, 1988). pregnant women are a stable subgroup of the total heterosexually active population and the trend in HIV infection in pregnant women should mirror that in the heterosexual population (Gill et al, 1989). The devastating course of HIV disease in children has been documented. In addition, pregnancy may mask HIV symptoms, may necessitate modification of treatment regimens and because it alters immune function, may theoretically alter the rate of HIV disease progression (Minkoff and Landesman, 1988).

In the light of the above, the present study was designed to know the prevalence of HIV infection among pregnant women

attending antenatal clinic of Government Maternity Hospital, Tirupati.

MATERIALS AND METHODS

Serum samples were collected from 400 pregnant women and tested for HIV antibodies by ELISA test using Wellcozyme brand kit supplied by ICMR, New Delhi. Seropositive persons were traced and second sample of serum was collected and retested by ELISA test. Repeatedly ELISA positive sera were sent to AIDS research centre, Department of Virology, Christian Medical College, Vellore for confirmatory W.B.test.

RESULTS AND DISCUSSION

In this study two pregnant women out of 400 were found to be seropositive for HIV antibodies by both ELISA and W.B. tests, the positivity rate being 0.5%. Both of them are primigravida in mid-term pregnancy, come from urban area and belong to low socio-economic status. There was history of multiple partners, drug abuse and blood transfusion in the past. Their husbands had history of STD's.

HIV infection among women delivering babies in the cities of USA has been reported to vary from 1 to 3.6% (Susan Holman et al 1989). In France a Study of 274674 pregnant women revealed that as many as 2 births or abortions per day involve women having HIV antibodies (Coles, 1988). from India as on 31.3.1989, seven pregnant women were found to be seropositive (Editorial Article, ICMR Bulletin, 1989) thus suggesting the prevalence of HIV infection among pregnant women greatly varies from place to place. Unlike the women in Europe and USA who

have been infected through intravenous drug abuse, the seropositive women detected in our study acquired HIV infection through heterosexual transmission. Current statistics suggest that one out of two children born to seropositive women develop and almost certainly die of AIDS before the age of 5 years (Coles, 1988). In 1968 most obstetricians had never seen genital herpes. In just 20 years, herpes infected an estimated 50 million Americans half of whom are asymptomatic. Centre for Disease Control Projections suggest the spread of HIV may parallel that of herpes unless the sexual patterns of our society change (Lomax, 1988). Practicing Obstetricians/Gynaecologists must understand the potential impact of HIV infection and the need to better counsel and hopefully identify a patient who at first glance may not appear to be high risk. AIDS is one of the most important health care problems facing us today (Gloeb, 1988).

Knowledge of HIV serologic status empowers women to make informed decisions about child bearing and to a lesser extent guides prenatal and neonatal care. Hence, prenatal HIV testing should be readily available to all pregnant women (Minkoff and Landesman, 1988). Large quantities of body fluids are handled in perinatal care and the virus has been isolated from amniotic fluid. Hence it is necessary to design appropriate protocols to prevent risk of exposure and possible infection with HIV in all deliveries. This may be difficult to achieve (Mundi et al, 1987).

ACKNOWLEDGEMENTS

The authors are thankful to Indian Council of Medical Research for providing

Financial support and AIDS ELISA test kits, to Director, AIDS Reference Centre, CMC, Vellore for performing Western Blot test, and also to Superintendent, Government Maternity Hospital, Tirupati, for according permission to carry the work.

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