Clinico-Epidemiological Profile of HIV Infection Over a Period of Six Years in a North Indian Tertiary Care Hospital

Dear Editor,

Acquired immunodeficiency syndrome (AIDS) is a pandemic with an increased global prevalence, and human immunodeficiency virus (HIV) has reached an important threshold in India. The geographic distribution of the HIV epidemic in India is varied and is based on the prevalence of HIV in low- and high-risk groups. The states of northwestern region of India, including the union territory Chandigarh, fall under low-prevalence area. The clinical course of the disease with HIV and pattern of opportunistic infections vary from country to country and also from patient to patient. In tropical countries like India, a handful of pathogens cause most of the opportunistic infections.

The present retrospective study was carried out over a period of six years, from September 1999 to September 2005. The Department of Microbiology, along with Department of Medicine, in our center acts as a zonal referral center of National AIDS Control Organization (NACO) under the auspices of State AIDS Control Organization (SACO). The analysis of the available data was done to determine and review the distribution and the presentation of HIV-infected patients in this region.

The total number of patients presenting with HIV during the study period was 223 [175 (78.48%) males and 48 (21.52%) females]. Number and gender distribution of HIV-infected patients year-wise is given in the Table.

The most common age group infected had age in the range of 30-39 years, followed by 40-49 years and 20-29 years. Heterosexual transmission was the predominant mode of infection (97.76%, 218/223). One case presented with history of blood transfusion, and two patients gave history of intravenous drug use. Two cases were of perinatal transmission of HIV from mother to child; both of their parents were infected with HIV.

Tuberculosis (30%) was the most common opportunistic infection, followed by Candida (25%), Herpes simplex virus (4%), Cryptococcus neoformans (3%) and Cryptosporidium parvum (2%). Toxoplasma gondii and Pneumocystis jirovecii were found in one case each. Amongst the AIDS indicator conditions, the common clinical presentations were fever (51%), weight loss (43%), asthenia (41%), cough (25%), diarrhea (17%) and primary generalized lymphadenopathy (16%). The maximum number of cases came from the surrounding states of Punjab (34.62%), followed by Haryana (30.77%) and Chandigarh (16.15%). An earlier study from our center had reported 0.6% (128/21180) anti-HIV antibodies seropositivity among voluntary blood donors during a period of four years, from May 1997 to July 2001. Punjab, being a neighboring state to Pakistan, is a seat of heavy international traffic across the border. Possibility of drug trafficking in this area cannot be ruled out. Moreover, the number of truck drivers operating in this area is very high. Chandigarh is presently facing a problem of high rate of immigration from the neighboring states, especially Haryana, Punjab and Uttar Pradesh. The increase in number of slums, usually with illiterate persons who are unaware of the threat of HIV, is further compounding the problem.

The present report highlights the clinical presentation and epidemiological data related to HIV infection from the northern part of India. The study emphasizes that education, counseling, early diagnosis of opportunistic infections and awareness of the disease can help to bring down the number of AIDS cases.

References


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