

HUMAN IMMUNODEFICIENCY VIRUS INFECTION IN BLOOD TRANSFUSED IN GYNAECOLOGICAL PATIENTS

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SUMMARY

A total of 200 patients from Gynae out-patient department with history of blood transfusion were screened for HIV infection. One patient was found HIV positive. The patient received blood during evacuation and curettage for abortion before 1985 in Middle East. The patient was screened abroad during her last pregnancy seven years ago. In PGMI/LRH, she was screened again and found HIV positive which was confirmed by Elisa and Western Bolt test.

INTRODUCTION

The human immunodeficiency virus (HIV) screening centre Lady Reading Hospital was established in 1989. The total number of patients screened at this centre since August 1989 to 31st August 1993 were 63911. The number of HIV positive cases were 48. Among the total of 48 HIV positive cases, four were female (8.3%). Out of four, two females acquired the HIV infection due to blood transfusion in Middle East.

The purpose of the study was to screen the female patients at out-patient department of Gynaecology who had blood transfusions at least three month ago (seroconversion period) The risk of transmission of HIV infection through infected blood is quite high (about 90 %). Another aim was to find out the incidence of transmission of HIV infection from mother to child.

The patients screened included all those cases who had transfusion for any gynaecological purpose in Pakistan as well as abroad.

MATERIAL AND METHODS

A total of 200 patients from out-patient department of Gynaecology, Lady Reading Hospital Peshawar, were screened for HIV infection from August 1992 to August 1993.

A proforma was designed in which the relevant information like, disease, date of transfusion, number of pints transfused, age, parity, socio-economic status, education, history of exposure to intravenous drugs, needles, visit or stay abroad and sexual history were noted.

5 cc blood was collected. The kits used were Wellcozyme HIV recombinant test kit by Wellcome Diagnostic and Serodia HIV particle agglutination kit manufactured by Fujiribio Inc Japan. The reactive samples with one kit were retested with other kit and then confirmed by Western Blot method from National Institute of Health (NIH) Islamabad.

RESULTS

The incidence of HIV infection in blood transfused gynaecological patient

was 0.5%. Only one patient was found HIV positive. This patient had history of abortion followed by evacuation and curettage before 1985, had received 2 pints of blood during the above procedure in Middle East.

DISCUSSION

By the first quarter of 1992, total of HIV positive in Pakistan were 129, which included 19 Acquired Immune Deficiency Syndrome (AIDS) cases. By the middle of 1992, the score had gone upto 150 as reported by National AIDS Centre, National Institute of Health, Islamabad.¹

WHO has estimated the incidence of new HIV-1 infection in the United States to be 0.6-0.8 per 1000 which corresponds to at least 40,000 new infection in adults and adolescents annually.²

The best guess for number of new cases of AIDS in England and Wales rises from 2110 this year to 2440 in 1997, according to Government working group.³

India and Thailand have started reporting HIV cases after 1987. According to World Development Report⁴, in Thailand one adult in 50 is infected. Our figure, when compared to the global situation, seems very small.

Projection of future course of epidemic is gloomy, conservative estimates from WHO are that by year 2000, 26 million individuals will be HIV infected and 1.8 million a year will die of AIDS⁵. Our patient was in the reproductive age group (32 years age). According to Barton et al¹ the vast majority (79%) women with AIDS are in the reproductive age group. According to Pertoson (1993) more than 90% of the infected individuals are in their economically most reproductive years.

The prevalence of HIV infection transmitted through blood transfusion according to Mujeeb⁶ was 1%. Our incidence was 0.5% less than his study. The risk of acquiring HIV infection through infected blood is very high, that is about 90%. In the United States infected blood is the single most important source for HIV infection in health care setting.

HIV infection is transmissible to the infant in utero and perinatally. According to Barton (7) the risk of an HIV infected mother giving birth to an infected child is 20-50%. This fact is evident from our study, as our patient had 3 deliveries after acquiring HIV infection. Among three her last child was HIV positive.

The incidence in women is 8.3% according to Nanda⁶. Among an estimated one million to one and a half million American infected with HIV about 10% were women.

The incidence of HIV infection in patients coming from abroad is higher as compared to the native population in Pakistan. This fact is evidence from the study of Raziq in which out of a total of 21 patients screened with history of stay abroad, 10 were positive for HIV virus.

HIV infection has produced many social, cultural and economic problems. The HIV infection has only recently begun to spread, it has so far caused 2 million individuals and infected about 13 million individuals.^{8,9}

A blood transfusion should only be given when absolutely indicated. All unnecessary blood transfusion should be discouraged. It can be prevented by treating any anaemia preoperatively. The surgeon can help by preventing excessive blood loss during surgery. When blood transfusion is given, the

blood should be screened of HIV. The screening should be established in District and Tehsil hospital as well. Awareness of Public by mass media regarding the mode of transmission is important as it can help in prevention of the disease.

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