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Epidemiology of Human Immunodeficiency Virus in Japan

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AIDS PATIENTS IN JAPAN

The Japanese committee for AIDS surveillance reported that there were 59 AIDS patients in Japan up to the end of October, 1987 (Table 1). Eight in 59 patients were non-Japanese. 34 (58%) and 18 (31%) cases were hemophiliacs and homosexuals, respectively. It was considered that almost all of the 18 homosexual patients were infected with human immunodeficiency virus (HIV) at foreign countries. In the heterosexual patients, 5 were female, and in 3 Japanese female cases, two were sex partners with foreign boy friends and one patient was unknown case. One heterosexual male patient was infected with HIV from foreign prostitute, and the other was unknown case.

Table 1. Number of AIDS Patients in Japan
Oct. '87

Case	No. Patient		Total
	M	F	
Homosexual	18 (6)*	-	18 (6)
Hemophiliac	34	-	34
Heterosexual etc.	2	5 (2)	7 (2)
Total	54 (6)	5 (2)	59 (8)

* () : Non-Japanese

As shown Table 2, more than half (61%) of 33 dead cases in 59 patients were the hemophiliacs.

HIV-CARRIERS IN JAPAN

Seroepidemiological studies to find HIV-infected carriers by detecting anti-HIV anti-

Table 2. Number of Dead Cases in AIDS in Japan
Oct. '87

Case	No. Patient	No. Death
Homosexual	18 (6)*	8 (2)
Hemophiliac	34	20
Heterosexual etc.	7 (2)	5 (2)
Total	59 (8)	33 (4)

* () : Non-Japanese

bodies were begun about 3 years ago in Japan. Table 3 shows a part of the results obtained from the cooperative studies of Nagasaki, Tottori and Yamaguchi Universities, National Osaka Hospital and National Institute of Health. First screening for anti-HIV antibodies was carried out by using 1st generation enzyme immunoassay kits, and the specificity of seropositive samples was confirmed by indirect immunofluorescent assay and immunoblotting or radioimmunoprecipitation assay. As shown

Table 3. Seroepidemiology of HIV in Japan

Case	No. Tested	No. Positive
Hemophiliac	399	120(30%)
Healthy blood donor	6,710	0
Hemodialysis pt.	164	0
Multiple blood recipient	46	0
HBV-vaccine recipient	36	0
HTLV-I carrier	234	0
EBV carrier	24	0
Pt. with collagen dis.	46	0
Pt. with malignant tumor	252	0
Other	144	0
Total	8,055	120

Table 3, there was no HIV-carrier in the healthy blood donors and the patients with various diseases except for hemophiliacs. Unfortunately, about 30% of Japanese hemophiliacs were infected with HIV.

Last year, Japan Red Cross Blood Center started the screening for the detection of anti-HIV antibodies in the blood donors by using gelatin-agglutination kit, Serodia-HIV. 19 (0.0002%) out of 9,300,000 blood samples were found to be seropositive, indicating that there is no endemy of HIV in general Japanese population at present.

The incidence of HIV-carriers in Japanese homosexuals is obscure because the those population is not exactly estimated. A researcher reported (personal communication) that five (4%) out of 113 Japanese homosexuals at Tokyo area were positive for anti-HIV antibodies.

EPIDEMIOLOGY OF HIV IN JAPAN

There are about 5,000 hemophiliacs in Japan and HIV-carrier rate is 30% on an average as previously described. Therefore, the total number of the infected hemophiliacs will be around 1,500. Since most, if not all, of the anti-hemophilic factor products used in Japan have been imported from the United States, and con-

sidering no endemy of HIV in general Japanese population, it is likely that HIV transmitted to Japanese hemophiliacs through the factors.

Although the number of active homosexuals in Japan was not exactly estimated, it has been supposed to be about 30,000. If the positive rate of 4% is applied to the number, about 1,200 Japanese homosexuals might be infected with HIV.

On the other hand, as the Japanese population is about 120 million, the number of HIV-carriers in general Japanese population might be calculated by using 0.0002% of the result obtained from the screening of blood donors. An estimated number is 240.

Therefore, the total number of the HIV-carriers in Japan are roughly estimated to be 3,000. However, the number, except for that of the hemophiliacs, is not accurate because the homosexuals and the individuals who have been guilty do not want to offer their blood for testing or avoid the test. Therefore, although HIV is not endemic in general Japanese population, there are several thousands HIV-carriers in Japan.

From the epidemiological point of view, it is characteristic in Japan that more than half of AIDS patients and about half of HIV-carriers concentrated on the hemophiliacs.