

Rebuilding of the Medical Care System

The Status and Issues of Team Medical Care for HIV-infected Persons in Regional Block HIV/AIDS Specialized Hospitals in Japan

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Abstract

In Japan, the reported number of patients infected with HIV increases year after year. One of the most important issues is how to treat or care for HIV-infected patients. HIV infection has become a chronic disease which can be treated by antiretrovirals. However, although a prescription may be appropriate and sufficient, the treatment may fail if a patient is unable to take the medication properly. Moreover, drug-resistant HIV may develop. Therefore, how patients take the initiative to continue taking their medication is key to successful treatment. The purpose of team medical care for HIV-infected patients is to have patients patient able to manage on their own, including taking their medication, and to improve and maintain their own health. Provision of appropriate support by the team is important for this purpose. Provision of team care means each staff member (specialists including medical doctors, expert nurses, pharmacists, clinical psychologist (counselors), medical social workers, etc.) divides responsibilities according to their specialties in the medical care that must be provided to a patient, and pursues work with a sense of responsibility and consideration from the patient's point of view. This paper examines the present status and issues of HIV medical care in regional block HIV/AIDS specialized hospitals in Japan.

Keywords: HIV, AIDS, regional block HIV/AIDS specialized hospital*, prefectural HIV/AIDS specialized hospital*, HIV/AIDS specialized hospital*, team medical care

(*see Fig.3 on Page 7 in Kozo AKINO's "Various Policies for HIV/AIDS Control after the Revision of AIDS Prevention Guideline")

1. Introduction

The infection routes of HIV infection are broadly categorized into sexual acts, maternal-infant infection and blood transfusions and all are deeply related to the actions of people. Prevention of HIV infection tends to be thought of as easy, but if we look at the fact the HIV infection continues to spread in many countries, how difficult effective prevention becomes clear¹⁾. It has been 26 years since the first report of AIDS, and treatment of HIV infection has made major progress. Multi-drug combined therapy using anti-HIV drugs can halt the progress of the HIV infection and delay the onset of the AIDS virus; thus the annual number of incidents of AIDS patients in developed countries. Meanwhile, in Japan, the annual number of new infected persons is increasing and the annual number of persons with AIDS which has shown a downward trend in other developed countries continues to increase²⁾. The HIV infection explosive wave that occurred in Asian countries such as China will come to affect Japan in future, which has deep relations with these countries. It is not an exaggeration to say that we are now facing an important time of whether we can stop the spread of HIV infection/AIDS in Japan^{3,4)}.

In Japan, AIDS policies have been implemented based on the settlement of the so called HIV-tainted blood trial involving persons who contracted HIV through infusion of HIV-tainted blood products. Over ten years has passed since the settlement and the situation surrounding HIV infection/AIDS in Japan has changed greatly. First, the recent infection rout has been primarily through sexual contact, next, thanks to the progress of treatment, the HIV virus has become something of a chronic disease that can be medically managed. Considering that HIV is a sexually transmitted disease, then, should control measures be taken with AIDS as one of the sexually transmitted diseases? Compared with other sexually transmitted diseases, important characteristics are indicated in the HIV infection (Table-1). From these characteristics, AIDS measures can be considered more important than other sexually transmitted diseases. In considering specific measures in preventing HIV infection it cannot be forgotten that one's sex life is an important part of daily life. In Europe and the US there is the concept of "sexual health", and what we're trying to say is that improving and maintaining one's sexual health is an important approach to preventing HIV or sexually transmitted diseases.

Table1: Characteristics of HIV Infection

- *Thanks to advancements in medicine HIV is a chronic disease, but there is still no cure.
- *The infected must take medicine for life and the lifetime cost per person of medicine is high at approximately 100 million yen.
- *Many HIV positive people are in the carrier stage with no outward sign of infection and have no subjective symptoms but still be infectious.
- *An antibody test must be taken to find out if one is positive or not.
- *AIDS is the target of societal bias and prejudice and stills carries a stigma in society.
- *HIV is spreading among people who are highly vulnerable in society.

Currently, persons in which the infection was detected in the asymptomatic carrier state have been saved from AIDS thanks to anti-HIV treatment, and at the same time the spread of infection from infected persons can be prevented; therefore, early infection is crucial⁵⁾. Then, how should infected persons in the asymptomatic carrier state with no subjective symptoms take the antibody test. Other articles cover the details but in this article I would like to emphasize that medical treatments are associated with voluntary HIV testing. Consider voluntary testing, look at the merits and demerits to the tester if the result comes up positive. If positive, the person will be become the object of bias and prejudice, and personal demerits arise that various actions will be limited. Meanwhile, if one tests positive and can receive medical treatment, there is the personal merit of being able to prevent the progress of HIV and the personal merit of contributing to public health so as to prevent the infection of others. Meanwhile, the significance of testing probably decreases for people if, knowing one is positive, that receiving medical treatment will be difficult. In Japan, HIV therapy is subject to health insurance and in many cases “physical disability certificate” (shintai shogai techo) as immune dysfunction are applied and accepted with the state of disease in which anti-HIV treatment is initiated. In such cases the medical support for independence is applied to those HIV infected persons. Currently, the personal burden of anti-HIV treatment depends on the person’s income; therefore, young people not yet financially established can receive treatment. Knowing that one person is infected may incur expenses of roughly 100 million yen over a lifetime for medicine, but the medical and economic effects of this have great significance in preventing new infections of others. Providing medical treatment of HIV is primarily aimed to improve and maintain the health of HIV-positive persons; moreover, because it is expected to have a deeper relationship with the motives of testing for the antibody, it can be said building a medical therapy structure is one of the important pillars for AIDS measures. From this perspective, prevent and treatment are like two wheels of AIDS measures⁶⁾. In Japan a base hospital system has been built comprising HIV/AIDS specialized hospitals involved in treating HIV/AIDS (hereinafter “HIV/AIDS specialized hospitals”). This structure is unique in the world and has come to play a major role in AIDS measures. Discussed below are the central issues concerning regional block HIV/AIDS specialized hospital involved in AIDS medical care in the regions (hereinafter “regional block HIV/AIDS specialized hospitals”), and the current state and issues thereof.

2. Significance of Base Hospitals in AIDS Treatment

Japan has built, and achieved results with, a treatment structure for HIV that is unique in developed countries. In the 47 prefectures of Japan, 369 HIV/AIDS specialized hospitals were selected and 14 facilities in Hokkaido, Tohoku, Tokai, Hokuriku, Kinki, Chugoku Shikoku, and Kyushu as regional block HIV/AIDS specialized hospitals, and positioned at the top of HIV treatment nationwide is the AIDS Clinical Center (hereinafter ACC) of the International Medical Center of Japan. According to revisions of the so-called AIDS Prevention Guideline, selection of one or more prefectural HIV/AIDS specialized hospitals in HIV treatment (hereinafter prefectural HIV/AIDS specialized hospital) in the 47 prefectures is underway⁷⁾. Let us examine the increase of patients, which is one reason for the emergence of a HIV/AIDS specialized hospital. The ten years until 1997 (from 1987 to 1996) when regional block HIV/AIDS specialized hospitals were selected and the ten years from 1997 (from 1997 to 2006) are compared based on the report of the Committee on AIDS Trends on the number of reported HIV cases and AIDS cases. The number of HIV cases jumped from 2,094 to 6,250 (2.98 times) and the number of AIDS cases soared from 794 to 3,245 (4.09 times) (Table-2). The main infection route for both is through sexual contact, and many of the reports are from major metropolitan areas such as Tokyo and Osaka. However, the distribution recently has been nationwide, and HIV can be said be spreading broadly through the regions and not just the cities. Since from this year, the report format to the Committee on AIDS Trends is such that the prefecture of residence is also reported, the situation of infections in the regions is expected to

be clearer moving forward. In the revision of the AIDS Prevention Guideline, the division of roles of the government and autonomous bodies was clearly stated. In the medical structure as well, the role that must be played by autonomous bodies has increased greatly. The burden of regional block HIV/AIDS specialized hospitals at which HIV treatment in the regions has been focused so far, has greatly increased in accordance with the increase in patients, etc. from the time of selection, so much so that the performance of block base hospitals could become paralyzed⁹⁾. The selection of a prefectural HIV/AIDS specialized hospital is hoped to be a well-timed measure.

It is necessary to look back at the history of this disease to understand the role of HIV/AIDS specialized hospitals. The history of AIDS begins with reports of an immunodeficiency disease in adults that had caught on in cities in the US in 1981. At the time, if a person contracted AIDS, because no treatment was available, the patient would die in one to two years. The cause was unknown, and people were afraid of the deadly AIDS disease and treated as a taboo topic. Mass media fueled fears of AIDS among citizens by presenting the fact that many AIDS patients were male homosexuals or drug abusers and scenes of AIDS patients who faced death emaciated and weak. In cities in Europe and the US, overreactions by people regarding AIDS occurred one after the other in AIDS panics. Japan also had incidents such as the Kobe and Matsumoto incidents. HIV was discovered in 1983 and thereafter the pathology of AIDS, infection route, and treatment methods became clear. The first HIV drug in the world, AZT, was approved by the US FDA in 1987. However, the negative image of AIDS still hasn't been wiped out today, and many people have the incorrect understanding that "HIV infection equals death". Bias, prejudice and incorrect knowledge regarding AIDS is not limited to the citizenry; a similar situation is being seen even with experts in the medical field. HIV and HBV are blood-borne infectious viruses with the same infection route, and the basics of infection measures in hospitals are the same. Compared with the positive antibody ratio following exposure in work such as through needles, etc., HBV is reported about 30% and HIV reported 0.3%. The measures for HIV infection can be sufficient with HBV measures and treatment of HIV-positive persons by medical facilities handling HBV is possible. Therefore, if it is said that medical facilities handling HBV cannot treat HIV-positive persons, that is a kind of denial of treatment. Certainly there are anti-vaccines for HBV, but caution is needed since the antibody positive ratio after an incident with HIV is not zero. However, regarding work-related exposure to HIV, infection can be prevented with thorough infection prevention measures in advance and preventive medicine after exposure. Another reason why medical institutions avoid HIV treatment is that because some are apprehensive about the reducing in the number of other patients because of treating HIV-positive people. At present, it is not true that the number of other patients in a regional block HIV/AIDS specialized hospital which carries out HIV treatment has decreased because of its provision of HIV treatment. Furthermore, there are other factors such as, aren't co-medical staff in the hospital opposed to treatment? and what countermeasures after exposure should be used. The facilities selected as HIV/AIDS specialized hospitals have increased results of HIV treatments by a process of clearing such factors of unease without damage. Conversely, these processes can be said to be a major merit for facilities such as increasing awareness of patient privacy of employees in facilities, and reviewing infection measures in the hospital. Furthermore, HIV infection treatment methods are making steady advances, and presently, it is also needed for HIV treatment to obtain and maintain specialized knowledge and skills of HIV-infection treatment as well as to build a team treatment structure that will be discussed later are also needed for HIV treatment; expectations are high for base hospitals to be facilities that can provide specialized HIV treatment.

Table 2: Trends in HIV Infection in Japan

	1987-1996	1997-2006	Increase ratio (times)
HIV cases ¹			
Japanese citizenship	1033	5217	5.05
Foreign citizenship	1061	1033	0.97
Total	2094	6250	2.98
AIDS cases			
Japanese citizenship	567	2568	4.53
Foreign citizenship	227	677	2.98
Total	794	3245	4.09

Note 1: from the Committee on AIDS Trends Report

3. Current Status of HIV Treatment at Regional Block HIV/AIDS Specialized Hospitals

The roles of regional block HIV/AIDS specialized hospitals are to correct regional disparities of HIV treatment. For this purpose, block base hospitals are positioned to improve and maintain the level of HIV treatment through demonstrating four functions; treatment (general practice from all departments), clinical research (trials, etc.), training and education, and communication information. In reality, with the ACC, which has carried out pioneering HIV treatment and research as the leader of HIV treatment in Japan, regional block HIV/AIDS specialized hospitals, while exhibiting the abovementioned functions, have come to play an important role as a leader or in a coordinating role in their respective region. Regional block HIV/AIDS specialized hospitals, in addition to HIV treatment professionals and nurses in charge, have counselors dispatched from the Japanese Foundation for AIDS Prevention or information related staffs in order to provide team cares as described below⁸⁾. The status of patients receiving care at some regional block HIV/AIDS specialized hospitals is indicated in Table 3. At these facilities, many patients from not only the prefecture they are in but from neighboring prefectures are being cared for. At the National Hospital Organization Osaka National Hospital, roughly over 60% of HIV-infected patients of the Kinki region, the Sendai Medical Center and Nagoya Medical Center, roughly over 50% and the Kyushu Medical Center, roughly 40% are being treated. A concentration of HIV-infected patients from wide areas of the regions is indicated at any of the facilities. All has conducted specialized treatment and general practice from all departments such as providing treatments with AIDS patients, HBV or HCV-complicated cases treatment, introducing and maintaining anti-HIV treatment, and conducting drug resistance tests, and play a major role in HIV/AIDS treatment throughout the regions. In the following section, the treatment situation at regional block HIV/AIDS specialized hospitals is examined using as an example of the National Hospital Organization Osaka National Hospital, which is the Kinki regional block HIV/AIDS specialized hospital.

Table 3: Medical Situation of 4 Regional Block HIV/AIDS Specialized Hospitals

	Sendai	Nagoya	Osaka	Kyushu	Total
No. of patients ¹	150	617	1069	208	2044
Breakdown by infection route					
Originated in blood product	49	27	72	49	197
Homosexual sexual contact	62	313	747	120	1242
Heterosexual sexual contact	39	159	180	38	416
Other	0	118	70	1	189
No. of reports by block ²	278	1190	1678	477	3623
Share of number of patients ³	54%	52%	64%	44%	56%

1: As of end of March 2007. Unit: persons

2. From the Committee on AIDS Trends Report

3. The number of patients of each block divided by the number of report by block is indicated by %.

4. HIV Treatment Situation at the Kinki Regional Block HIV/AIDS Specialized Hospital

The National Hospital Organization Osaka National Hospital was selected as a base hospital in 1996 and a regional block HIV/AIDS specialized hospital in the Kinki block in April 1997, and demonstrates the four functions of treatment, research, education and training and communicating information. The number of patients increases every year, and the total number patients was 1,175 as of the end of September 2007, and the number persons first diagnosed this fiscal year is expected to exceed 200 persons. The department of infectious disease is in charge of primarily HIV treatment that is independent as a representative medical department. In accordance with the increase of the number of patients, presently team treatment is implemented with doctors (one department head, one senior doctor, three doctors, and three post-interns), four expert nurses, two expert pharmacists, two clinical psychologists, and two medical social workers.

1) Outpatient situation. A breakdown of the number of treated patients (as of the end of March 2007) is indicated in Table 4. Regarding the ages of the people when first diagnosed, 30.5% in their 20s, 39.7% in their 30s, 17.3% in their 40s, with 70% accounted for just by persons in their 20s and 30s, and adding persons in their 40s accounts for 90%. By sex, 94% are men. Regarding the stage of disease when first diagnosed, 75.7% are infected persons, 24.3% have contracted the disease. Regarding residence at time of first diagnosis, Osaka accounts for 70.0% while other prefectures in the Kinki region accounts for 25.7%. For infection route, the majority is through sexual contact (heterosexual 16.9%, homosexual 69.9%), and infection by blood products accounts for 7.1%. Regarding the reason for detection of HIV-infected person, in addition to voluntary testing by an antibody test, many were due to testing (many conducted at medical institutions) following diagnosis of sexually transmitted diseases such as syphilis, acute hepatitis B, and pointed condyloma. The number of new patients in FY2006 (hereinafter in parentheses, compared with the previous fiscal year), 194 persons (+7.2%), total number of patients 6,562 (+43.5%), and average number of patients per day, 25 (+35%). As the departments of treatment at the hospital, nearly all are used.

2) Hospitalization. In FY2006, the number of actual patients was 343 (+5.2%), the total number of patients 5,499 (+11.2%), and average number of patients per day, 15.1 (+11%). The number of patients hospitalized due to an AIDS illness was 193 until the end of March 2007, and a breakdown of the by AIDS indicator disease shows pneumocystis pneumonia, 103 people (53.3%), cytomegalovirus virus infection, 65 people (33.6%). Tuberculosis accounted for 20 (10.3%), and progressive multifocal encephalopathy which leaves advanced damage over time accounted for eight people. Of the patients hospitalized with AIDS illnesses, 20 (10.3%) died at the hospital.

3) Anti-HIV treatment situation. Nearly 20 anti-HIV drugs have been approved in Japan. Multidrug therapy in which three agent are combined is the standard treatment 5). Recently, with some dosages, four pills once in the morning (one tablet, three capsules) by development of combined agents and once a day dosages, and compared to before, dosage is much easier. However, the expression of side effects over the short-or long-term are at as high a frequency as ever. The cost for drugs (anti-HIV drugs) in FY2006 at the hospital totaled 870.52 million yen (up 44% over the previous fiscal year; nonhospital ratio 69%). Of the 325 persons who started anti-HIV treatment methods at the hospital from FY1997 to FY2005 and were also coming to the hospital at the end of FY2006, there were 312 persons with a virus amount in the blood under detectable amounts (50 copies/mL) near the end of FY2006, and the treatment success ratio was 96% (ratio of patients with the amount of virus in the blood under detectable levels).

4) Surgery and prevention of mother-infant infection. At the hospital from 1997 to the end FY2006, surgery on HIV-infected persons was performed in 91 cases. The diagnosing departments were nearly all of the surgery departments. Since April 1997, the obstetrics department has diagnosed 13 HIV-positive pregnant women. In all cases, the HIV-positive pregnant women, through anti-HIV treatment for the pregnant women, and mother-infant infection prevention methods such as delivery through Caesarean section and not giving the mother's milk, all delivered their babies without incident. No baby was infected with HIV.

Table 4: Medical Situation at National Hospital Organization Osaka Medical Center (as of the end of March 2007) (Unit: persons. % in parentheses)

Stage of disease at initial diagnosis		Age at initial diagnosis		Region of residence at time of initial diagnosis	
HIV cases	811 (75.9%)	Under 20	19 (1.9)	Kinki	1,023 (95.7)
AIDS cases	258 (24.1%)	20s	315 (30.5)	Osaka Prefecture	748
Total	1,069	30s	441 (39.7)	Osaka City (reposted)	458
Sex		40s	183 (17.3)	Hyogo Prefecture	141
Men	1,004 (94.0)	50s	79 (7.7)	Kyoto Prefecture	81
Women	65 (6.0)	60s and over	32 (2.9)	Nara Prefecture	28
				Wakayama Prefecture	15
				Shiga Prefecture	10
				Outside Kinki	46

5. Issues of Regional Block HIV/AIDS Specialized Hospitals

Issues common to and being taken up by regional block HIV/AIDS specialized hospitals at the present time are listed in Table 5. 1) Issues that come up as a result of a concentration of patients. A concentration of patients can build up experience in treatment and the expertise of the facility can be

maintained and improved; however, at the same time, when the number of patients exceeds the limits of the ability of the treating department or the facility, the level of treatment per patient decreases and medical employees become exhausted. HIV is a chronic disease and medical treatment is long-term; therefore, it is necessary to evaluate how to build a long-term medical treatment structure, and as noted on the following pages, I think it is necessary to divide roles among facilities in accordance with the illness stage, disease and treatment situation, etc. of the patients. 2) Building a support structure for the cases with having difficulties in independent living. In the cases such as progressive multifocal encephalopathy and HIV encephalopathy, even if lifesaving beyond the acute period by treatments to AIDS can be achieved, serious damage may be caused in the process. It is difficult for a base hospital, which is a facility for acute stage responses, to respond to patients who need mainly nursing. While rehabilitation facilities, nursing facilities or in-home nursing or provision social welfare services at home may be considered more appropriate than care at a hospital for the acute stages, in most cases a facility that can take the patient cannot be found⁹¹⁰⁾. In many cases, patients are in their 20s to 40s and in more than a few cases without a family or support structure, and this is major issue for regional block HIV/AIDS specialized hospitals. 3) Building a medical care tie-up structure. Because there are some medical care functions in a HIV/AIDS specialized hospital that were not originally provided by that hospital, in some cases in responses to complicated diseases, medical care tie-ups with other facilities are needed. Furthermore, in the future, when the number of patients has increased, regional block HIV/AIDS specialized hospitals, prefectural HIV/AIDS specialized hospitals or HIV/AIDS specialized hospitals will likely need to link-up in accordance with the stage and disease status, etc. of the patient and the functions of the respective medical care, etc. 4) Development of expert medical professionals. Presently, universities that are educating about HIV infection in particular are few, and the number of training facilities that can build up HIV medical treatment experience is also limited. Considering the increase of patients in the future, the first urgent task is to educate and train doctors. Similarly, the training of nurses, pharmacists, psychologists, medical social workers and so on that make up a team of medical care must also not be forgotten. 5) Building a dental medical care network. The number of HIV/AIDS specialized hospitals with a dental/dental surgery is just one-third of the total. For HIV-positive persons, the need for dental medical care is a constant and sometimes urgent treatment is needed. While going to a base hospital with a dental department to receive dental medical care may be ideal, it cannot be said to be realistic. It goes without saying that dental medical care being responded to only at base hospitals is quite impossible. Furthermore, the actual situation in Japan is such that few dentists specialize in infectious disease dentistry. Therefore, a network of HIV medical care dentists in the regions should be built quickly. 6) Provision of services in foreign languages. The foreign language services, at least, in the medical care field in Japan is lacking. A foreign language services system in medical care is limited for the regions and for facilities. Compared with other interpreting, medical interpreting requires knowing specialized terminology and knowledge related to medicine, and education and training must be undertaken such as protecting the patient's privacy; it is strongly desired to establish a system and to develop medical interpreting.

Table 5: Issues of the Medical Care Structure Involving Regional Block HIV/AIDS Specialized Hospitals

- 1) Lowering of medical care level and exhaustion of medical professionals due to concentration of patients
- 2) Building a support structure for cases where autonomy is difficult
- 3) Building a inter-facility medical care collaboration structure
- 4) Education and development of specialized medical professionals such as doctors, nurses, pharmacists, psychologists and social workers.
- 5) Building an infectious disease dental medical care network
- 6) Providing services using foreign languages

6. What Initiatives Should be Taken to Resolve the Issues of Regional Block HIV/AIDS Specialized Hospitals

The increase of HIV-positive persons is not limited to metropolitan areas such as Tokyo/Kanto and Osaka; increases are being seen in many prefectures in Japan, and measures in the regions need to be strengthened. With respect to this, a framework of the prefectural HIV/AIDS specialized hospital has been created as part of the revision of the AIDS Prevention Guideline. Expected of the prefectural HIV/AIDS specialized hospital is to take up functions (specialized medical care, training functions, communicating

information) as a core of HIV medical care in the autonomous bodies. Next, in considering medical care in the regions, when the number of patients increases, the situation may arise in future where the regional block HIV/AIDS specialized hospitals, prefectural HIV/AIDS specialized hospitals and HIV/AIDS specialized hospitals alone cannot handle the increase. For example, it can be said that the situation of going to a HIV/AIDS specialized hospital for a cold or cavity is strange, a division of roles is needed moving forward in response to the increasing number of patients and in accordance with the disease stage, disease state, and treatment situation, etc. of patients and the functions of the medical care facilities (Fig. 1). Many HIV-infected persons are young who have not established themselves socioeconomically. In some cases, HIV-infected persons cannot continue their social lives including human relationships because of the disclosure of being HIV-positive, and medical care is not only for the body; sometimes support is also needed with respect to spiritual, psychological, societal and economic aspects. Furthermore, adherence needs to be improved and maintained once dosage starts, and therefore the provision with team medical care is needed¹¹⁾. In the medical treatment fee revision of 2006, a team medical care addition was newly created as a viral disease treatment fee for facilities that matched the standards. In practice, the “Outpatient Team Medical Care Manual in HIV Treatment¹²⁾” created by a team working on “research related to improving and maintaining dosage adherence”, a Research on HIV/AIDS by MHLW Health and Labour Sciences Research Grants. Furthermore, with respect to how social welfare services should be for patients for whom their condition has stabilized but have been left with heavy burdens, research is underway by a team working on “research related to support of HIV-positive patients for whom autonomy is difficult”, a Research on HIV/AIDS by MHLW Health and Labour Sciences Research Grants.

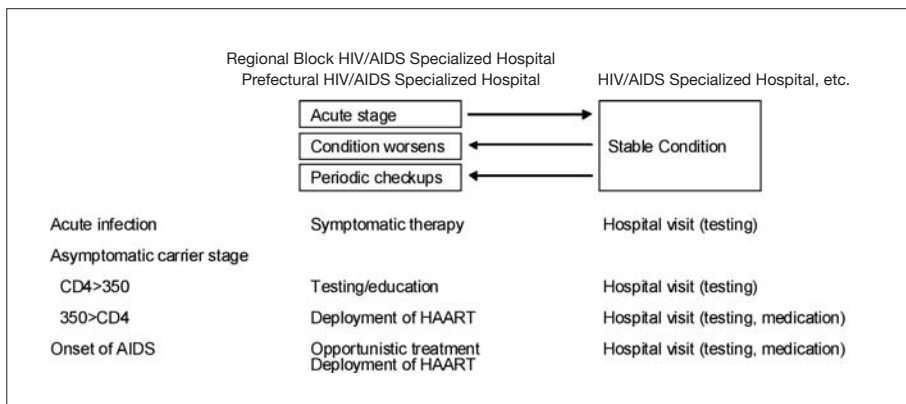


Fig. 1 Regarding the Collaborative HIV Medical Cares due to Stages and Conditions, etc. of Patients

To the left are indicated the stages of patients (acute infection stage, asymptomatic carrier stage, onset of AIDS stage). A specialized hospital means a facility that has experience and competency with deploying anti-HIV treatment; most are considered the regional block HIV/AIDS specialized hospitals and prefectural HIV/AIDS specialized hospitals. HIV/AIDS specialized hospitals, etc. can be considered HIV/AIDS specialized hospitals other than the regional block HIV/AIDS specialized hospitals and prefectural HIV/AIDS specialized hospitals as well as hospitals, which are not a HIV/AIDS specialized hospital, or health centers where HIV medical care is carried out. In any stages, acute stage medical care, that is, deployment of HIV treatment is carried out at specialized hospital, and if the patient's condition is stable, the patient receives periodic checkups at a base hospital, etc. (every one to three months), and once or twice a year is diagnosed at a specialized hospital and the patients conditions and details of medical care, etc. are checked. If conditions worsen, the patient is introduced to a specialized hospital. In the asymptomatic carrier stage, because ongoing observation may be good enough if the number of CD4 positive T lymphocytes exceeds 350, in general the patient has only to receive periodic checkups (every 2-3 months) and blood tests. Since HIV treatment is required when the number is below 350, anti-HIV treatment are deployed at a specialized hospital, and the patient is introduced to a HIV/AIDS specialized hospital, etc. if their condition is stable. Note that at facilities other than HIV/AIDS specialized hospitals, there are issues such as measures after exposure in the course of work, certification of medical care facilities providing the medical support for independence, problems at non-hospital pharmacies and so on.

7. What to Expect in the Future

The ratio of HIV-positive blood per 100,000 blood donors in blood donation in Japan was 0.134 cases in 1987, but has been increasing steadily, and in 1999 exceeded 1.0, and in 2006 reached 1,744. According to the Committee on AIDS Trends, regions in which the total number of infected persons exceeds 10 people per 100,000 in a major city such as Tokyo have already been reported²⁾. The number of infected persons in Japan is estimated to reach 500,000 people by 2010. Comparing the numbers of patients by major disease, tuberculosis accounts for 39,000 people; viral hepatitis, 410,000; malignant neoplasms of the stomach, 280,000, malignant neoplasms of the breasts, 156,000; and Parkinson's disease, 145,000 (from Trends in the Health of Japanese Citizens, 2007, page 446, Table 46, Total Number of Patients, MHLW "Patient Survey"). If the number of infected persons and patients increases at its current rate, in the near future, HIV will likely become not much of a rare disease. Many of the estimate value of the 50,000 people are hypothesized to be in an age range of 15 to 49 years old, and using 56.34 million as the estimated population of this age group in Japan presently as of October 1, 2006, the incidence rate is under 0.1%. In the future, if the number of persons infected through sexual acts, especially male homosexuals, increases in the manner of a quadratic function, the incidence rate in people in their 20s to 40s is likely to increase every year. Looking at the situation from regional block HIV/AIDS specialized hospitals which truly feel this situation, it is important to realize measures from both aspects, prevention and treatment. These measures include promotion of antibody testing, promotion of antibody testing during pregnancies, and setting up a treatment structure. Time is needed to see results implementing measures based on the revisions of the AIDS Prevention Guideline and implementing measures of strategic research of AIDS. For now, the number of true HIV-positive persons is expected to increase, and it is necessary to implement measures rapidly. In Japan, public health centers and public health research centers and the like have results in taking up an important role in measures against these diseases. The HIV/AIDS specialized hospital system built by the government and autonomous bodies has also achieved certain results. This is the time for autonomous bodies to grasp the infection situation in their respective areas, propose measures and implement them. While nationwide the majority of infections are of young persons of Japanese citizenship through male homosexual sexual acts, in some regions, the situation is such that infection cases by heterosexual sexual acts and with patients of foreign citizenship and middle-aged patients cannot be dismissed. It may be necessary to form a clear view of what are the groups requiring major measures in the regions. With respect to the medical care structure, many of the HIV/AIDS specialized hospitals are hospitals for acute stages and cannot accommodate patients in a chronic stable stage. The number of patients needing social welfare services such as nursing or home care will increase. A major issue moving forward is building a structure and linking up with services that will accept such patients. In accordance with the revised AIDS Prevention Guideline, it is strongly hoped that the health policies of autonomous bodies will develop specific measures.

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