American College of Physicians

Infectious Diseases Society of America

Position Paper

on

Acquired Immunodeficiency Syndrome

3 March 1986

In 1981 the acquired immunodeficiency syndrome (AIDS) was identified in the United States. From June 1981 to January 1986, over 16,000 persons in the United States were reported as having AIDS (1), and it is estimated that 40,000 persons will develop the syndrome during 1986 and 1987 (2). Approximately 75% of persons who currently have AIDS are homosexual or bisexual men (3). Others affected include intravenous drug abusers, heterosexual contacts of bisexual men, and infants born to mothers with AIDS (4). Transfusion of whole blood and blood components also has been implicated in transmission of the syndrome, for example, in patients with hemophilia and in recipients of multiple blood transfusions.

The virus that causes the profound immunosuppression that is the hallmark of AIDS, the human T-cell lymphotropic virus type III (HTLV-III) or lymphadenopathy-associated virus (LAV), has been isolated from human blood, semen, bone marrow, tears, saliva, urine, cerebrospinal fluid, lymph nodes, feces, and brain tissue (4-6). However, to date, the disease has been found to be transmitted only by intimate sexual contact, by shared contaminated needles, by the injection of infected blood or blood products, and across the placenta from mother to infant (7). Casual contact with an infected person, whether symptomatic or asymptomatic, has not been found to transmit HTLV-III (4). This includes hand shaking, sharing common drinking glasses, clothing, or toilets; and sharing "air space." There also is no documented evidence that insect vectors (for example, lice and mosquitoes) or vaccines (for example, the hepatitis B vaccine) are implicated in the transmission of HTLV-III infection.

The natural history of infection with HTLV-III has not been clearly defined. Almost all persons infected develop antibodies to HTLV-III. There are still many uncertainties as to the eventual outcome of the infection. However, according to reports from the Centers for Disease Control, only a minority of those infected proceed to develop any symptoms, including those of the lymphadenopathy syndrome or the AIDS-related conditions. An even smaller proportion develops AIDS (8). Cofactors that may predispose to or promote the development of the clinical manifestations of the infection are poorly understood. Additional research into the natural history of HTLV-III infection is needed to assess how and why the virus incapacitates the immune system in certain persons, rendering them susceptible to recurrent, eventually lethal opportunistic infections and other diseases. After development of AIDS and the onset of opportunistic infection, the mean survival time of patients in 1982 was approximately 6 to 9 months (9), which now has expanded to approximately 11 to 15 months.

The uncertainties about the natural history of HTLV-III infection have led to many questions and fears, few of which can be directly addressed at our present level of knowledge. For example, of the increasing reservoir of persons in the United States who are HTLV-III positive yet asymptomatic, how many will eventually develop AIDS or AIDS-related conditions? The data from the Centers for Disease Control suggest about one third, but these data are based solely on a cohort of homosexual men in San Francisco who were followed for 5 years. Concerns have been expressed that the actual proportion could eventually be much higher. The neurologic and encephalopathic manifestations of AIDS are being recognized increasingly (10-13), and they raise the specter of chronic neurologic disability, possibly requiring institutional care for an unknown number of patients.

Studies are underway to define the total economic impact of AIDS. A recent study by Hardy and colleagues (14) estimates that approximately $147,000 is expended for hospital care of each patient with AIDS. These estimates exclude the cost of outpatient care, medication, and social costs such as loss of employment, reduced productivity, shortened life expectancy, and the consumption of social and community support services. Such costs create ethical dilemmas at the institutional and societal level regarding the provision of financial resources to care for a rapidly increasing number of patients, most of whom will eventually require intensive care. Noneconomic costs to persons who are HTLV-III positive and those with symptomatic AIDS include the psychological impact of the disease on patients, their friends and relatives, and health care professionals who provide care for them, as well as the effects of institutional and societal prejudice.

Funding for AIDS research has been given high priority. For fiscal year 1986, the U.S. Congress has appropriated $234 million to the Public Health Service for AIDS research and services (15). These funds will be used for basic research on HTLV-III and pathogenesis of HTLV-III related illness, epidemiologic studies, and drug and vaccine development and testing, including large-scale clinical trials of vaccines and antiviral agents. Research directed at long-term therapy also is planned.

While considerable public and private funding has been allocated for AIDS research, much more needs to be done to address the serious social, ethical, and public health implications of this catastrophic and ultimately fatal disease. For persons with the HTLV-III infection, the social implications include lack of confidentiality, loss of jobs, ostracism from the community, denial of insurance, eviction notices from landlords, exclusion of children from school, refusal of morticians to prepare bodies for burial, and efforts by hospital unions and some health care professionals to exclude persons with AIDS from medical care. As with other terminally ill patients, caring for patients with AIDS raises ethical dilemmas about when to provide life-sustaining treatments such as mechanical ventilation and cardiopulmonary resuscitation (16). Ethical and legal guidelines recommend shared decisions by physicians and informed patients. There should be no discrimination in the care of persons with AIDS throughout their illness, including their final days of life.

Because large numbers of persons have been or will become infected with HTLV-III, there is a need for a national program emphasizing prevention and coordinated services that can be managed at the local level. This program should focus on prevention of infection through education.

Efforts in primary prevention should include the education of adolescents and should acknowledge AIDS as a predominately sexually transmitted disease. Secondary prevention for seropositive persons should involve educational efforts to minimize their risk of transmitting the virus to other persons and to reduce the probability of their developing clinical manifestations of the infection. The American College of Physicians and the Infectious Diseases Society of America support the expansion of these educational activities and urge physicians to take a leading role in putting an end to the increasing, and often inappropriate, public anxiety associated with this disease.

POSITION 1

The American College of Physicians and the Infectious Diseases Society of America urge all physicians, surgeons, nurses, other medical professionals, and hospitals to provide competent and humane care to all patients, including patients critically ill with AIDS and AIDS-related conditions. Denying appropriate care to sick and dying patients for any reason is unethical.

RATIONALE

Health care workers who have the primary responsibility for a patient's well-being must provide high-quality nonjudgmental care to their patients, even at the risk of contracting a patient's disease. Physicians and nurses are charged by the ethics of their healing profession to treat patients with all forms of sickness and disease (17). It is inappropriate for any health care employee to compromise the treatment of patients with transmissible, lethal diseases such as AIDS on the grounds that such patients present unacceptable medical risks.

Aside from the ethical responsibility to provide quality care to patients with AIDS, no epidemiologic data suggest that concerns about transmission of AIDS from patients to health care workers justify an unwillingness to treat these persons. The syndrome is a blood-borne, sexually transmitted disease that is not spread by occupational contact, even in the health setting (18-20). Serosurveys of many health care workers in the United States have noted only two instances of seropositivity among persons not belonging to an apparent risk group. Among more than 1500 health care workers who have sustained a needlestick injury or direct exposure to potentially infectious secretions from a patient with AIDS, only 3 have become HTLV-III positive. The risk of infection with the virus from these exposures is thus very low, in marked contrast to the risk of hepatitis B virus infection (6%-30%) after similar kinds of exposure. This low risk can be reduced even further with attention to proper technique and handling of instruments in phlebotomy and other procedures when contact with body fluids is likely (21).

Medical personnel can protect themselves adequately by following recent Public Health Service guidelines (18-20) and the American Hospital Association's recommendations (22) for the protection of health care workers, which set forth routine precautionary measures appropriate to prevent nosocomial transmission of HTLV-III. These guidelines include recommendations for managing parenteral and mucous membrane exposures to blood or other body fluids; precautions to be taken with sharp instruments; appropriate use of protective garments; use of equipment to minimize the need for mouth-to-mouth resuscitation; sterilization and

disinfection procedures; housekeeping procedures; and disposal of infective body wastes. A recent report that 14% of 278 workers in one institution had potential percutaneous exposure to HTLV-III emphasizes the significance of these precautionary measures for health care personnel (21).

In addition to the fear of transmission, health care workers may be reluctant to care for patients with AIDS because of the stressful psychological and emotional dimensions of that treatment. In the long term, these patients do poorly despite optimal care, or they develop new infections as soon as one is successfully treated. They often have long hospitalizations and require many procedures that medical staff may begin to view as futile. They are typically young and critically or terminally ill. Many caregivers find it difficult to discuss the relevant issue of foregoing life-sustaining treatment, such as intubation or cardiopulmonary resuscitation, with such patients (16).

The stress of caring for these patients can be alleviated if the clinically achievable goals of medical therapy are clearly defined and communicated to patients. When treatment no longer provides therapeutic benefit, supportive care, including control of pain and other symptoms of discomfort, should be offered and provided. Patients should never be made to feel that the medical profession is forsaking them, even when their disease is relentlessly progressive and irreversible. Recognition of and concern for patients' needs for supportive care can relieve any anxiety or reluctance on the part of health care professionals that is associated with treating patients with AIDS.

POSITION 2

Health care workers, employers, community service organizations, welfare agencies, public housing authorities, prison officials, and school officials are urged to educate themselves and others about HTLV-III, and particularly to understand the limited mechanisms by which the virus can be transmitted. Dissemination of such knowledge should serve not only to prevent the further spread of infection but also to alleviate discrimination against those who become infected with the virus.

RATIONALE

It is essential that persons who come into social or professional contact with persons who have contracted AIDS understand the basic concepts of viral transmission and modify their behavior toward these patients accordingly. Transmission of HTLV-III appears to require direct inoculation of the virus into the bloodstream. In fact, there is good evidence that even prolonged and close familial exposure to persons infected with HTLV-III will not transmit the virus. Antibodies to the virus have not been found in the blood of family members of persons infected with HTLV-III, other than the patients' sexual partners or the infants of infected mothers (20). Because HTLV-III appears not to be transmitted by casual contact, there is no justification for restricting social or professional relations with patients with AIDS that do not involve the possible transmission of body fluids (23).

Children with HTLV-III infection who are school-aged or who are attending day-care centers may present additional risks of transmission due to their immaturity and to the uncontrollable nature of physical

contact among children in the school setting. The Centers for Disease Control, the American Academy of Pediatrics, and the National Education Association have advocated that children who lack control over their body secretions; who are prone to biting, spitting, or vomiting; or who have open skin lesions should be placed in a restricted school environment (5,24,25). However, school-aged children with AIDS or HTLV-III seropositivity who do have control over body functions should be allowed to attend class in a normal setting (5,24,25). The American College of Physicians and the Infectious Diseases Society of America support this policy as one that protects school-aged children without unnecessarily discriminating against all young persons with HTLV-III infection.

The approach to patient care, employment, housing, penal institutionalization, and education should be based on knowledge of the actual risks of infection and not on speculation or unwarranted fears. Teaching persons about the known mechanisms for transmission of the HTLV-III infection--specifically sexual, intravenous, and perinatal exposure--will both alleviate unnecessary alarm and encourage appropriate minimization of risks. Once educated, those in the public service sector who are likely to come into contact with infected persons will be able to respond in a humane fashion without jeopardizing their own health and safety.

Social prejudice is a public problem that should evoke concerned responses from many sectors of society. When prejudice results in patient harm, however, it must be addressed by the medical profession. Reported instances of unwarranted or discriminatory conduct by health care providers reflect the importance of continuing educational efforts within hospital settings (16).

POSITION 3

Testing for the HTLV-III antibody should be used only in situations in which it will be of benefit to public health and not discriminatory.

RATIONALE

Enzyme immunoassays to detect antibody to the AIDS-associated virus were first licensed in March 1985. Because the goal of the tests was to screen HTLV-III-positive blood out of the nation's blood supply, they were made to be highly sensitive. This purpose has been served, and the occurrence of transfusion-associated HTLV-III infection is expected to be close to nil in the future. The enzyme immunoassay, however, has a large number of false-positive results, particularly among low-risk persons, and therefore positive results for HTLV-III antibody must be interpreted with caution. Some laboratories offer confirmatory tests with the Western blot or fluorescent antibody techniques, which are more specific than the enzyme immunoassay. These confirmatory tests are not licensed or highly standardized, however, and their results should also be used and interpreted with caution unless good quality-control and proficiency-testing programs ensure the accuracy and validity of the results. Thus, the enzyme immunoassay is not a test for detecting the presence or potential onset of AIDS. As with other causative agents of infectious diseases, a broad spectrum of responses to HTLV-III infection is possible, AIDS being the worst outcome. Data from the Centers for Disease Control suggest that, in a population followed over 5 years, fewer than 10% of those infected with the virus have developed AIDS; approximately 25% have developed AIDS-related conditions; and the rest

of those infected have remained asymptomatic to date (8). Given the range of possible outcomes for HTLV-III infection, the serologic test by itself does not provide sound prognostic information for asymptomatic persons.

The test may be useful for confirming the diagnosis of AIDS or AIDS-related conditions in patients who have preliminary symptoms of these diseases. However, routine antibody screening, even for segments of the population known to be at risk for acquiring AIDS, is unnecessary. Because of strong evidence that HTLV-III cannot be transmitted by casual contact, it is not in the public interest to require the testing of persons whose social or sexual lifestyles render them unlikely to have been exposed to the virus. The discriminatory impact of such a practice outweighs any potential benefit that might be derived from testing asymptomatic persons. Likewise, it is inappropriate to require health care employees, food service workers, or personal service workers (such as barbers or manicurists) to be tested serologically for HTLV-III infection as a condition of employment. The Public Health Service does not recommend testing for these groups (18).

Selected screening of persons whose personal conduct poses unique risks to others should be conducted, if at all, on a case-by-case basis. In addition, hospitals that receive a high proportion of patients with AIDS (75% of all such patients have been seen by only 280 of the more than 6,000 acute care hospitals in the United States) (18) may deem it appropriate to test selected asymptomatic employees for possible exposure to the virus; however, testing should be done on a voluntary basis. In all cases in which asymptomatic persons are tested, those whose results are positive for exposure to HTLV-III infection should be counseled that even though they are presumed to have infectious disease for purposes of public health safety, such a result does not mean that they have or will develop AIDS.

POSITION 4

Counseling and educational efforts, rather than policies promoting physical restriction and isolation, are appropriate methods for controlling the spread of HTLV-III infection.

RATIONALE

Mass education and individual counseling as to the modes of transmission are appropriate ways to control the spread of HTLV-III infection. The behaviors that are known to transmit the virus, such as sexual contact and sharing of intravenous needles, are generally consensual and voluntary in nature. Education regarding the health hazards of engaging in unsafe activities should therefore prove to be an effective method for controlling the epidemic spread of this disease.

Quarantining persons with AIDS or persons who have been exposed to HTLV-III and are presumed to be capable of transmitting the virus is an unjustified invasion of individual liberty and privacy. Such a policy would, in all likelihood, result in the nonreporting of many AIDS cases and the loss of cooperation of risk-group members that is critical to further understanding of HTLV-III-related diseases.

Quarantining also would not be an effective policy for controlling "incorrigible" persons with HTLV-III infection who refuse to curtail

sexual activity or drug abuse. The isolation of particular persons who openly behave in an irresponsible fashion cannot effectively control an epidemic that is frequently transmitted by persons who are unaware that they are carriers. To quarantine a few persons with clearly infectious disease under such circumstances would not be productive. In fact, it would communicate a false sense of security within high-risk groups, who then might believe that the incarceration of such persons makes it safe to engage in sexual and drug practices known to transmit the HTLV-III infection.

POSITION 5

The confidentiality of patients infected with HTLV-III should be protected to the greatest extent possible. When a patient is known to be infected with HTLV-III as defined for reporting purposes by the Centers for Disease Control or relevant state health bodies, this information should be reported to appropriate health authorities. Beyond mandated reporting requirements to the appropriate public health authority, however, the occurrence of a confirmed positive result in a serologic test for antibody to HTLV-III should not be communicated by health professionals to any other party except the patient whose blood has been tested.

RATIONALE

Health care professionals involved in the care of patients with AIDS and in the testing of persons for the antibody to HTLV-III should be sensitive to patients' needs for confidentiality and their right to privacy. Patients with AIDS risk societal and, in some cases, legal repercussions if their disease is known. Homosexuals and intravenous drug abusers believed to have infectious disease may evoke condemnation of their life-style by others and may find themselves discriminated against and socially isolated.

There is great public misunderstanding about the significance and predictive value of the HTLV-III antibody test. The scientific community generally accepts that those whose results are reproducibly sero-positive have been infected with HTLV-III; these persons are also assumed, for reasons of public safety, to be currently infectious. The test does not predict, however, which infected persons are at risk of developing AIDS or other clinical diseases caused by the virus. Physicians and other health professionals who gain access to information on the antibody test results of a patient should not impart that information to anyone other than the patient, except as may be required by the appropriate public health authority. The potential for public dissemination of such information to have an unnecessary discriminatory impact is a detriment that far outweighs any benefits associated with the communication of seropositive screening results to parties other than the patient.

Several state health authorities now require reporting of confirmed HTLV-III seropositive tests, and some other state health authorities as well as the Centers for Disease Control are moving in this direction. The American College of Physicians and the Infectious Diseases Society of America also support such reporting. Despite the lack of vaccine or therapy, the HTLV-III problem is not without precedent for epidemiologists and public health agencies. Historically, efforts by the nation's public health agencies to control communicable diseases have included infection and disease surveillance; identification of at-risk persons and

populations; data analysis by time, place, and person; intervention strategies appropriate to the epidemiologic pattern of transmission; health education; skillful contact tracing in selected circumstances; and utmost care in the confidential management of sensitive information. These established public health techniques should prove useful in limiting HTLV-III infection until greater assistance is available from the research.

With less than 1 year's experience, it is clear that tests for antibody to HTLV-III are more than simply measures to screen donated blood. Their high sensitivity and, in higher prevalence groups, their predictive power for true exposure to HTLV-III will substantially assist the efforts at disease prevention. When properly used, test information may also enhance the education efforts that remain, at this time, the principal intervention to prevent HTLV-III transmission.

Thus, case reporting to health authorities, including the reporting of sensitive and potentially damaging information such as known risk factors, is a necessary component of a workable public health policy system for limiting transmission of HTLV-III. Revealing the identity of persons with AIDS to their prior sexual contacts, to those with whom they have shared intravenous needles, or to any others who are likely to have had contact with their bodily fluids may be appropriate to curtail the spread of infection. However, any broader communication of information identifying these patients is likely to result in the unwarranted denial of public services to such persons, as well as other forms of prejudice and mistreatment. Furthermore, it is a fundamental violation of privacy. The identification of persons infected with HTLV-III should be limited to the greatest extent possible without sacrificing protection of the public health.

POSITION 6

Physicians should incorporate into their practices standard procedures for taking complete sexual histories of their patients and should assume responsibility for candid communication with, and education of, persons known to be at risk for HTLV-III infection. The need to modify sexual practices in order to prevent transmission of infection should be stressed. In addition, physicians are urged to take a major part in educating the public to eliminate misconceptions about AIDS.

RATIONALE

Research indicates that Americans are often poorly informed about health issues and frequently receive, and act on, information that is incomplete, misleading, incorrect, and even potentially harmful. There remains a costly and sometimes dangerous information gap between the public and the health care system. Because of this gap, patients may be limited in their ability to make sound and appropriate health care decisions. Today, AIDS represents a prime example of the hazards of a health information gap, as evidenced by the unprecedented, in recent times, public and professional anxiety toward a disease. In 1981, some appropriate apprehensions were aired because many important facts about the disease were unknown. In 1986, however, many of the previously unanswered questions about AIDS have been answered, and it is incumbent on physicians to provide this timely and accurate information to their patients. Because of the complex nature of the disease and the regular emergence of new information, physicians must make special efforts to keep well informed, even if they do not have

patients with AIDS or AIDS-related conditions in their practice. Important areas to consider include an understanding of the basic concepts of infection transmission in general; the nature of HTLV-III transmission; the significance of a positive test for HTLV-III antibody; and the guidelines for risk reduction, including the concepts of "safe sex," that currently are being promoted among the risk groups.

Studies have shown that physicians often are reluctant to discuss the sexual preferences and practices of their patients (26). However, AIDS as a predominantly sexually transmitted disease, now emphasizes the importance of learning the sexual history of patients, particularly new patients. It is recognized that for personal reasons not all physicians may be able to function with sufficient detached concern to provide counseling to patients whose sexual lifestyles put them at risk. Ethically, such physicians are bound to refer these patients to competent colleagues willing to provide such services. To be less than explicit with patients at risk for AIDS and to avoid discussing the consequences of their behavior is to neglect seriously the physician's responsibility to educate patients. The infectious nature of the disease, its causes, and the steps to be taken to prevent transmission must be discussed candidly with each patient known or suspected to be at risk regardless of how the physician views the subject.

Some recently published guidelines believed to reduce the chances of contracting or transmitting HTLV-III infection are widely available and, although unproven, should be provided to all patients at risk for the disease. For example, the U.S. Public Health Service (19) has recently issued the following general recommendations on "safe sex":

> Do not have sexual contact with persons who are known to have, or are suspected of having, AIDS; who are known to be, or are suspected of being, carriers of the virus; or who have a positive result on the HTLV-III antibody test.
>
> Do not have sex with multiple partners, or with persons who have had multiple partners (including prostitutes). The more partners you have, the greater your risk of contracting AIDS.
>
> Do not inject illicit drugs. If you do inject drugs, your risk may be lessened by not sharing needles or syringes.
>
> Do not have sex with people who inject drugs (including prostitutes).
>
> Protect yourself and your partner during sexual activity. If you suspect that you or your partner has been exposed to the HTLV-III virus: use condoms, which may reduce the possibility of transmitting the virus; avoid oral-genital contact; avoid sexual practices that may cause injury or rips in tissue; avoid open-mouthed, intimate kissing; and avoid contact with any body fluids (semen, blood, feces, urine, etc.)

Further guidelines recommend that any man who has had sex with another man since 1977 should not donate blood, plasma, body organs, other tissue, or sperm (22,27,28). In addition, seropositive women should not breast feed their babies (29). Other precautions include advising persons against

such practices as being shaved or tattooed or having their ears pierced in places where optimal sterilization of equipment is not assured.

The very title "doctor," from the Latin docere, to teach, implies a responsibility to share knowledge and information. Physicians must be explicit with their patients about AIDS. Proper education regarding the known risks in contracting or transmitting HTLV-III infection is the responsibility of the physician, not only for his or her patients, but also for the persons with whom that patient may have contact.

In addition to individual patient education, physicians are encouraged to offer their services to public educational activities so that accurate information can be provided. Examples of such activities include community forums, public service announcements on television and radio, the production of brochures and other written materials, and telephone hotlines.

POSITION 7

The American College of Physicians and the Infectious Diseases Society of America encourage continued research into the causes, prevention, and treatment of AIDS and AIDS-related conditions. In addition to biomedical aspects, research into sociologic and economic issues related to AIDS should be increased. Studies of the effectiveness of various types of educational interventions and control measures also should be undertaken.

RATIONALE

The rapid advances in medical science and technology have been due in large measure to considerable governmental efforts to promote research. Allocations from the federal government to such research institutes as the Centers for Disease Control, Food and Drug Administration, National Institutes of Health, and the Alcohol, Drug Abuse, and Mental Health Administration continue to increase both progressively and rapidly. The approved budget for fiscal year 1986 includes $234 million for AIDS research and social and educational services. This amount exceeds that appropriated for fiscal year 1985 by $126 million. In addition to federal funds for research, a recent report of the Intergovernmental Health Policy Project has stated that since 1983 nine states have appropriated a total of $42 million for programs related to AIDS, with slightly more than half of these monies dedicated specifically to research.

Much research is necessary to understand this disease fully. Research projects include epidemiologic studies on the natural history of HTLV-III infection; the role of cofactors such as cytomegalovirus infection in the pathogenesis of AIDS; the prevalence of antibody in various population groups and the incidence of seroconversion; primary prevention and control measures including vaccines and therapeutic intervention; and community health education and risk reduction. In addition, clinical research includes testing of both antiviral drugs and drugs effective against AIDS-related opportunistic infections; evaluating psychological stress in persons with AIDS and AIDS-related conditions; and evaluating behavioral changes in patients and the psychological implications of AIDS.

To date, no treatment has proved to be effective against HTLV-III infection, but several agents are under investigation. These include anti-

viral agents that suppress the replication of HTLV-III and immune stimulators that can enhance the damaged immune system. Now that methods for propagating HTLV-III in the laboratory are widely available, in-vitro screening of drugs for antiviral activity can be accomplished quickly. Thus, many compounds, in addition to those already under study, may be identified as deserving clinical evaluation (27).

Sociologic and economic research is needed because of the impact of AIDS on public life. The American Public Health Association has advocated increased federal and state funding to provide educational programs, social and home care services, housing, and health care to persons with AIDS.

In addition to the American Public Health Association recommendations, the American Sociological Association has recognized that research on the social dimensions of the AIDS epidemic has received minimal attention. As a result, they have developed a resolution to encourage research, publications, and teaching about the sociologic aspects of the syndrome.

The rapid growth in the number of cases and the prognosis for persons with AIDS or HTLV-III infections have generated a great deal of concern about the means of controlling the spread of the disease, for example, mandatory screening of certain subgroups of the population. Because data on the epidemiology of AIDS are still being produced, every effort must be made to study the effects of these programs, including the impact of either positive or negative serologic tests on the behavior of persons at risk, and the possible untoward effects of providing persons with totally unexpected evidence of their being infected.

Continued investigation into all aspects of AIDS is necessary if this disease is to be contained. Support from both the public and private sectors is needed for research, patient care, patient services, and education. Priorities include investigation into the natural history of infection, and development of antiviral agents and vaccines that are safe and effective.

Approved: February 8, 1986, Infectious Diseases Society of America
March 3, 1986, American College of Physicians

REFERENCES

1. Centers for Disease Control. Update: acquired immunodeficiency syndrome in the United States. MMWR. 1986; 34: 17-21.

2. Hardy AM, Allen JR, Morgan WM, Curran JW. The incidence rate of acquired immunodeficiency syndrome in selected populations. JAMA. 1985; 253: 215-20.

3. Jaffe HW, Hardy AM, Morgan WM, Darrow WW. The acquired immunodeficiency syndrome in gay men. Ann Intern Med. 1985; 103: 662-4.

4. Curran JW, Morgan WM, Hardy AM, Jaffe HW, Darrow WW, Dowdle WR. The epidemiology of AIDS: current status and future prospects. Science. 1985; 229: 1352-7.

5. Marwick C. AIDS-associated virus yields data to intensifying scientific study. JAMA. 1985; 254: 2865-8, 2870.

6. Centers for Disease Control. Recommendations for preventing possible transmission of human T-lymphotropic virus type III/lymphadenopathy-associated virus from tears. MMWR. 1985; 34: 533-4.

7. Centers for Disease Control. Heterosexual transmission of human T-lymphotropic virus type III/lymphadenopathy-associated virus MMWR. 1985; 34: 561-3.

8. Centers for Disease Control. Update: acquired immunodeficiency syndrome in the San Francisco Cohort Study, 1978-1985. MMWR. 1985; 34: 573-5.

9. Centers for Disease Control. Update on acquired immunodeficiency syndrome (AIDS) - United States. MMWR. 1982; 31: 507-8, 513-4.

10. Holland JC, Tross S. The psychological and neuropsychiatric sequelae of the acquired immunodeficiency syndrome and related disorders. Ann Intern Med. 1985; 103: 760-4.

11. Ho DD, Rota TR, Schooley RT, et al. Isolation of HTLV-III from cerebrospinal fluid and neural tissues of patients with neurologic syndromes related to the acquired immunodeficiency syndrome. N Engl J Med. 1985; 313: 1493-7.

12. Resnick L, diMarzo-Veronese F, Schupbach J, et al. Intra-blood-brain-barrier synthesis of HTLV-III-specific IgG in patients with neurologic symptoms associated with AIDS or AIDS-related complex. N Engl J Med. 1985; 313: 1498-504.

13. Black PH. HTLV-III, AIDS, and the brain (editorial). N Engl J Med. 1985; 313: 1538-40.

14. Hardy AM, Rasch K, Echenberg D, Morgan WM, Curran JW. Economic impact of the first 10,000 cases of acquired immunodeficiency syndrome in the United States. JAMA. 1986; 255: 209-11.

15. Pharmaceutical News Index. NIH grants: minimum 6,100 new and competing awards. The Blue Sheet. 1985; 28(48):1-2.

16. Steinbrook R, Lo B, Tirpack J, Dilley JW, Volberding PA. Ethical dilemmas in caring for patients with the acquired immunodeficiency syndrome. Ann Intern Med. 1985; 103:787-90.

17. Burrow GN. Caring for AIDS patients: the physician's risk and responsibility (editorial). Can Med Assoc J. 1983; 129:1181.

18. Centers for Disease Control. Recommendations for preventing transmission of infection with human T-lymphotropic virus type III/lymphadenopathy-associated virus in the workplace. MMWR. 1985; 34: 681-6, 691-5.

19. Office of Public Affairs, Public Health Service. The Public Health Service Response to AIDS. AIDS Information Bulletin. 1985; (November): 2-3.

20. Norman C. AIDS trends: projections from limited data. Science. 1985; 230: 1018, 1021-1.

21. Weiss SH, Saxinger WC, Rechtman D, et al. HTLV-III infection among health care workers: association with needle-stick injuries. JAMA. 1985; 254: 2089-93.

22. Advisory Committee on Infections in Hospitals, American Hospital Association. Recommendations of the Advisory Committee on Infections in Hospitals: Management of HTLV-III/LAV Infections in the Hospital. Chicago: American Hospital Association; 1986.

23. Friedland GH, Saltzman BR, Rogers MF, et al. Lack of transmission of HTLV-III/LAV infection to household contacts of patients with AIDS or AIDS-related complex with oral candidiasis. N Engl J Med. 1986; 314: 344-9.

24. Committee on School Health, Committee on Infectious Disease. School Attendance of Children and Adolescents with HTLV-III/LAV Infection. American Academy of Pediatrics; 1986. (In press).

25. Centers for Disease Control. Education and foster care of children infected with human T-lymphotropic virus type III/lymphadenopathy-associated virus. MMWR. 1985; 34: 517-21.

26. Ende J, Rockwell S, Glasgow M. The sexual history in general medicine practice. Arch Intern Med. 1984; 144: 558-61.

27. Department of Health and Human Services. Progress on AIDS. FDA Drug Bull. 1985; 15: 27-32.

28. Centers for Disease Control. Update: revised Public Health Service definition of persons who should refrain from donating blood and plasma in United States. MMWR. 1985; 34: 547-8.

29. Centers for Disease Control. Recommendations for assisting in the prevention of perinatal transmission of human T-lymphotropic virus type III/lymphadenopathy-associated virus and acquired immunodeficiency syndrome. MMWR. 1985; 34: 721-6, 731-2.