EXPERT ADVISORY GROUP ON AIDS

Note of the first meeting held on Tuesday 29 January 1985, Room 30, Hannibal House.

Present:

Dr M E Abrams, DHSS, in the Chair

Professor M Adler
Professor A L Bloom
Dr J D Cash
Dr M Contreras
Dr N S Galbraith
Professor A Geddes
Dr H Gunson
Miss E Jenner
Dr D B L McLelland
Dr P Mortimer
Dr D Pereira-Gray
Dr A J Pinching
Dr P Rodin
Dr R Tedder
Professor R Weiss
Mr R Wells
Dr M Whitehead
Professor A J Zuckerman

DHSS

Dr E D Acheson (CMO) - part
Dr E L Harris
Dr D Holt
Dr W Miller
Dr J Modle) for EAGA 8
Dr G Pincherle) only
Dr A Smithies
Miss B Weller
Mr A J Williams
Mr T Murray (Admin Secretary)
Dr M Sibellas (Medical Secretary)
Mr D M Bailey (Minutes)

SHHD

Dr R G Covell

DHSS (N Ireland)

Dr N Donaldson

Welsh Office

Dr Ferguson Lewis

Apologies for Absence

1. Apologies had been received from Dr D A J Tyrrell, Chairman of the Advisory Committee on Dangerous Pathogens (ACDP) and Director, MRC Common Cold Unit.

Introduction

2. The Chairman thanked members for responding so quickly to the CMO's invitation to serve on the Expert Advisory Group. He emphasised the importance of the subject on which they were being asked to provide advice, and drew attention to the fact that papers circulated in connection with the Group were not for publication. Meetings should also be regarded as private and the proceedings of the Group be treated in strict confidence.

3. Dr Abrams advised that the names of Dr J D Cash, Consultant Adviser in Blood Transfusion (Scotland) and Dr D B L McLelland Regional Director, Edinburgh and SE Scotland Blood Transfusion Service, should be included in the list of expert members at EAGA1.

4. CMO added his personal thanks to those expressed by Dr Abrams. He stressed the potentially serious epidemiological problem posed by AIDS. The terms of reference drawn up for the Group were very wide; specific issues on which advice was sought included measures necessary - in the field of public health - to control the spread of AIDS. Also CMO hoped for unequivocal advice from the Group on the question of the introduction of a screening test into the NBTS.

Background Paper on AIDS (EAGA2)

5. This paper had been circulated for information prior to the meeting. Dr Pinching pointed out that the paper underestimated the amount of research being carried out into AIDS. In addition to MRC-funded research, much work was being done supported by the pharmaceutical industry and private trusts.

Public Health Implications of AIDS (EAGA3)

6. Dr Galbraith in introducing his paper expressed satisfaction with the present system under which cases of the disease were reported through a variety of channels to CDSC. This system for national monitoring was operating efficiently and should the need arise could be expanded to monitor HTLV III cases as well as the fully expressed cases of AIDS presently being monitored. The efficiency of this system compared favourably with the statutory notification of some sexually transmitted diseases in the USA where large numbers of cases went unreported. Local surveillance posed different problems but these would not be resolved by making the disease statutorily notifiable.

7. The Group proceeded to discuss the practical implications of making AIDS a notifiable disease. It was suggested that problems on maintaining confidentiality could arise if confirmed or suspected cases were reported through normal notification procedures involving local authorities. Problems could also occur in the definition of AIDS for the purpose of amending Regulations.

8. Professor Weiss said that some patients, not necessarily having AIDS as clinically defined, might nevertheless be equally infective. He questioned how it would be possible to apply statutory provisions to control individuals found to be sero-positive who may - at some stage in the past - have been infective, but whose state of infectivity at the present time was unknown.

9. Dr Rodin felt that making AIDS notifiable could heighten public disquiet about the disease and the threat it posed to public health. This would be despite the fact that there was no certainty that the disease posed a risk to the public at large. Professor Adler pointed out that the threat of statutory powers being applied to AIDS sufferers or to suspected cases could alienate 'at risk' groups and the voluntary (sector) organisations like the Terrence Higgins Trust who work with them. This alienation could be counterproductive in achieving the cooperation of at risk groups in health education matters to check the spread of the disease.

10. Accepting the arguments which had been put forward for not making the disease notifiable, the Chairman drew attention to the interest which had focused on the need for Government action to prevent and control the disease. The availability of statutory powers might go some way to reassuring the general public that something was being done. The Group sounded a note of caution about moving too fast with legislation in a field where so many questions remained unanswered. Most cases could be handled through persuasion but if legislation had to be used it could be done by the application of powers within

existing legislation. Preparatory work on amendments to legislation which could be introduced in an emergency situation to allow the detention of an AIDS patient in hospital was one area where action would be warranted. Apart from this there was unanimous opposition from the Group to the idea of making AIDS subject to the range of provisions applying to notifiable diseases.

National Surveillance of AIDS - HTLV III Infection

11. Dr Galbraith briefly introduced his paper (EAGA 3(iii)). Dr Rodin raised the question of preventing patients with AIDS, or individuals who are sero-positive, from donating blood, and Dr Gunson asked specifically about means of monitoring potential donors, who might be infective, moving from one BTS Region to another. In the case of hepatitis B, there existed a system of notification between Regions. A number of issues needed to be considered and it was agreed that a small working group would be set up to consider the matter.

AIDS Counselling (EAGA 4)

12. There was general agreement that a need existed for AIDS counselling, and that a policy on this (where, when and by whom should be carried out etc) needed to be developed.

13. Haemophilia Centres and STD Clinics would provide some counselling - and indeed were already doing so - but would be constrained by the level of resources available. Much excellent work in this field had been done at St Mary's, Paddington; this work would make it a possible choice as a national centre for training health professionals in AIDS counselling if such a facility was thought to be necessary. For many people however especially amongst those found to be sero-positive by the Blood Transfusion Service, reference to an STD Clinic would be inappropriate.

14. Dr Pereira Gray stressed that counselling should not be regarded as an "optional extra", but as a function which had to be fully integrated into the medical care of AIDS cases. GPs would have a vital role to play in this, and their training in counselling in other fields would be valuable in this.

15. Following discussion, the Group concluded that counselling must be available at the point when an individual is first told that he has AIDS, and/or a positive test for HTLV III antibody, and should preferably be provided by the person who imparts this information. The person (or service) which instigates the screening test, and gives out the result - whether this be the NBTS, or STD Clinic, or hospital - must take responsibility for the consequences, including counselling. The provision of effective counselling could, however have significant resource implications.

16. Mr Wells said that AIDS patients would seek help and support from the whole range of health-carers, and that the development of counselling skills was just as important for nurses and other health-care professionals as it was for doctors. Dr Pereira-Gray again stressed the importance of involving the general medical practitioners, though it was generally recognised that the actual counselling would be best provided by an expert in the field. The STD Clinic would be an appropriate centre in many cases, but whatever the circumstances of a particular case there would always be a need for those involved to work together as a team - and for the GP to be in close liaison with the expert counsellor.

17. At the Chairman's suggestion it was agreed that a small working group be set up to consider the problems of AIDS counselling, and to provide a written paper on the subject for the next meeting of the EAGA. The working group would consist of Professor Adler, Dr Gunson, Miss Jenner, Dr Pereira-Gray, Dr Pinching and Professor Zuckerman. Dr Abrams would Chair this group. [Secretary's Note. Professor A Geddes and Dr J Green (St Mary's) have since agreed to join the working group.]

The Availability of the AIDS Screening Test (EAGA 5)

18. Professor Weiss said that work was currently being carried out with Wellcome Diagnostics to develop a screening test, but there were still problems to be solved and he was not able to say when the test would become available. Professor Zuckerman said that tests were also being carried out at his laboratory and that the results of the American Dupont and Travenol tests might be available within a few months. Comparisons would be made with the test being developed by Professor Weiss and Dr Tedder.

19. The Chairman reminded members that the November meeting of the BTS Advisory Group on AIDS had concluded that a screening test for all blood donors should be made available as soon as possible. He asked whether the EAGA endorsed this view.

20. There was general support for the introduction of a blood donor screening test as soon as practicable.

21. On the type of test to be used, Dr Gunson said there was an overwhelming preference for the use of the radioimmunoassay test in the NBTS, Whilst Professor Zuckerman stressed the need, first, for evaluation of other tests, including the ELISA test. The Chairman said that DHSS would ensure that all tests were evaluated.

22. With regard to testing "on demand", Dr Tedder felt that ideally a screening test should be available to anyone seeking it. Departments of Genito-Urinary Medicine would probably be the most appropriate centres. GPs would also need to have access to testing facilities. Professor Bloom said that haemophiliacs - as a group - should have ready access to screening test facilities, and provision of such a service for them should be less difficult than for the population at large because they formed a finite group. Dr McLelland thought that it would be impossible to separate, as a matter of policy, NBTS testing and STD clinic testing.

23. A sub-group was set up comprising Drs Gunson, McLelland, Mortimer, Pinching, Rodin and Tedder to consider the various aspects of screening tests for AIDS, in particular the best way of introducing the service when the tests become available. Dr Smithies would Chair this group.

AIDS Guidelines for Clinical and Laboratory Staff (EAGA 6)

24. The Group considered the Advisory Committee on Dangerous Pathogens' Interim Guidelines on AIDS, issued in December 1984. Miss Jenner drew attention to para 15 on page 5 of the Guidelines which referred to those who may be directly exposed to the tissue and body fluids of AIDS patients, and those undertaking laboratory work on the HTLV III virus, being asked to volunteer serum samples. Referring to the earlier discussion of screening test availability, Miss Jenner suggested that this was a group of staff who should be considered for screening.

25. The ACDP Guidelines had very considerable consequences for laboratories, not least of which were the financial implications. The facilities required to meet the recommendations were not currently available everywhere, and they would be expensive to introduce. The question was raised whether laboratories should regard all HTLV III antibody samples as dangerous. This was thought to be unrealistic.

26. The relevance of the Guidelines to Infectious Disease Units was questioned. Dr Pinching expressed the view that nothing in the Guidelines should be seen as affecting the overriding importance of patient care. The Chairman said that comments on the interim Guidelines, should be sent to the ACDP Secretariat.

Prevention and Health Education (EAGA 7)

27. The Chairman drew the Group's attention to the leaflets on AIDS issued by the Health Education Council, and the Terrence Higgins Trust, and to the draft leaflet produced by DHSS for the National Blood Transfusion Service. He sought views on these leaflets and asked what further action could, or should, be taken, bearing in mind the need to avoid any accusation of increasing public anxiety.

28. Professor Zuckerman was concerned at the reference to specific countries (Haiti) in the list of at-risk groups in the HEC leaflet. He thought this could well give a misleading picture and recommended that it be deleted from any reprint of the leaflet.

29. The blood-donor leaflet was not considered sufficiently forceful. It needed some redrafting particularly with regard to its objective of persuading homosexuals not to donate blood. Consideration should be given to the introduction of some means by which the "closetted" homosexual - possibly faced at a visit to a NBTS Centre with advice not to give blood - could unobtrusively withdraw from the system.

30. Regarding further action, Dr Galbraith drew attention to the recent 15% reported increase in IV drug abusers, and the fact that 2-3% of these were HTLV III positive. References to AIDS should be made in the literature being prepared as part of the current drug-abuse campaign.

31. Dr Pinching suggested that since a proportion of AIDS cases are drug addicts who have shared needles, there could be some merit in examining the possibility of providing free needles and syringes.

32. It was also suggested that greater use might be made of the national press, and possibly the involvement of publicity agencies, to try to ensure that AIDS publicity is directed in a way which the Department would find more beneficial to its aims and objectives. It was agreed that a member of the Department's Information Division should be invited to the next meeting of the Group.

Transplantation and AIDS (EAGA 8(i)) and Artificial Insemination and AIDS (EAGA 8(ii))

33. The Group considered papers submitted by the Department on these issues. It was unanimously agreed that in this context the same considerations applied to organ donors and to semen donors (for Artificial Insemination by Donor) as applied to blood donors".

People in the high-risk groups for AIDS should be asked not to carry organ-donor cards, and semen donation for AID should not be accepted from those in the at-risk groups.

Next Meeting

34. 13 March 1985 at 10.30 am, in room 1114, Euston Tower (286 Euston Road, NW1).

February 1985

EAGA Secretariat

CENTERS FOR DISEASE CONTROL

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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Provisional Public Health Service Inter-Agency Recommendations for Screening Donated Blood and Plasma for Antibody to the Virus Causing Acquired Immunodeficiency Syndrome

In March 1983, the U.S. Public Health Service issued inter-agency recommendations on the prevention of acquired immunodeficiency syndrome (AIDS) (*1*). Included was the recommendation that members of groups at increased risk for AIDS should refrain from donating plasma and/or blood. That recommendation was made to decrease the risk of AIDS associated with the administration of blood or blood products, which accounts for about 2% of all reported AIDS cases in the United States.

Evidence has shown that a newly recognized retrovirus is the cause of AIDS. Although this virus has been given several names, including human T-lymphotropic virus type III (HTLV-III) (*2*), lymphadenopathy-associated virus (LAV) (*3*), and AIDS-associated retrovirus (ARV) (*4*), it is referred to as HTLV-III in this discussion. Tests to detect antibody to HTLV-III will be licensed and commercially available in the United States in the near future to screen blood and plasma for laboratory evidence of infection with the virus. The antibody tests are modifications of the enzyme-linked immunosorbent assay (ELISA), which uses antigens derived from whole disrupted HTLV-III (*5*).

There is considerable experience with the ELISA test in research laboratories, but much additional information will be gathered following its widespread application. In the early phases of testing, a number of false-positive tests may be encountered. Adjustments in interpretation are anticipated as more is learned about the performance of the test in an individual laboratory and about the specific proportion of falsely positive or falsely negative tests in the screening setting where the test is used.

The present recommendations concern the use of these tests to screen blood and plasma collected for transfusion or manufactured into other products. They are intended to supplement, rather than replace, the U.S. Food and Drug Administration's recently revised recommendations to blood and plasma collection facilities and the earlier inter-agency recommendations (*1*). Additional public health applications of these tests in the understanding and control of AIDS will be described in a subsequent report.

BACKGROUND

Antibody Detection Studies

The ELISA test has been used in many research programs for detecting antibodies to HTLV-III in patients with AIDS and with AIDS-related conditions. In different studies, HTLV-III antibody was found to range from 68% to 100% of patients with AIDS, and in 84%-100% of persons with related conditions, such as unexplained generalized lymphadenopathy (*5-7*). Serologic surveys have yielded variable seropositivity rates in groups at increased risk for AIDS: 22%-65% of homosexual men (*8-11*), 87% of intravenous-drug abusers admitted to a detoxification program in New York City (*12*), 56%-72% of persons with hemophilia A (*13,14*), and 35% of women who were sexual partners of men with AIDS (*15*). In contrast to

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the above groups, HTLV-III antibody has been detected in fewer than 1% of persons with no known risks for AIDS (*4-10*).

The time needed to develop a positive antibody test following infection is not known. Data regarding the interval between infection with HTLV-III and seroconversion are limited. A nurse who sustained a needle-stick injury while caring for an AIDS patient developed antibody between 4 and 7 weeks following exposure (*16*). Additionally, a recent study described several asymptomatic individuals infected with HTLV-III for more than 6 months in the absence of detectable antibody (*17,18*). Nonetheless, currently available ELISA tests can be expected to identify most persons with HTLV-III infection.

Virus Isolation Studies

HTLV-III has been isolated from blood, semen, and saliva and has been recovered from many individuals in the presence of antibody (*19,20*). HTLV-III has been isolated from the blood of 85% or more of seropositive individuals with AIDS (*21*), lymphadenopathy, or other AIDS-associated conditions (*2*) and from three of four mothers of infants with AIDS (*2*). The virus has also been isolated from asymptomatic seropositive homosexual men and hemophiliacs, and has been recovered from 95% of seropositive high-risk blood donors who had been implicated in the transmission of AIDS through transfusion (*21*). The recovery of HTLV-III from these high-risk donors 2 or more years after their initial donation provides evidence that viremia may persist for years in both asymptomatic and symptomatic individuals. HTLV-III has also been isolated from some asymptomatic seronegative persons, but this is the exception (*17*).

Modes of Transmission

Epidemiologic data suggest that the virus has been transmitted through intimate sexual contact; sharing contaminated needles; transfusion of whole blood, blood cellular components, plasma, or clotting factor concentrates that have not been heat treated; or from infected mother to child before, at, or shortly after the time of birth. No other products prepared from blood (e.g., immunoglobulin, albumin, plasma protein fraction, hepatitis B vaccine) have been implicated, nor have cases been documented to occur through such common exposures as sharing meals, sneezing or coughing, or other casual contact.

Natural History of Infection

Information about the course of infection with HTLV-III is incomplete, but the majority of infected adults will not acquire clinically apparent AIDS in the first few years after infection. In some studies 5%-19% of seropositive homosexual men developed AIDS within 2-5 years after a previously collected serum sample was retrospectively tested and found to be seropositive. An additional 25% developed generalized lymphadenopathy, oral candidiasis, or other AIDS-associated conditions within the same interval (*11,22*). The long-term prognosis for most persons infected with HTLV-III is unknown.

SCREENING BLOOD AND PLASMA

Initial Testing

Persons accepted as donors should be informed that their blood or plasma will be tested for HTLV-III antibody. Persons not wishing to have their blood or plasma tested must refrain from donation. Donors should be told that they will be notified if their test is positive and that they may be placed on the collection facility's donor deferral list, as is currently practiced with other infectious diseases, and should be informed of the identities of additional deferral lists to which the positive donors may be added.

All blood or plasma should be tested for HTLV-III antibody by ELISA. Any blood or plasma that is positive on initial testing must not be transfused or manufactured into other products capable of transmitting infectious agents.

When the ELISA is used to screen populations in whom the prevalence of HTLV-III infections is low, the proportion of positive results that are falsely positive will be high. Therefore,

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the ELISA should be repeated on all seropositive specimens before the donor is notified. If the repeat ELISA test is negative, the specimen should be tested by another test.

Other Testing

Other tests have included immunofluorescence and radioimmunoprecipitation assays, but the most extensive experience has been with the Western blot technique (*22*), in which antibodies can be detected to HTLV-III proteins of specific molecular weights. Based on available data, the Western blot should be considered positive for antibody to HTLV-III if band p24 or gp41 is present (alone or in combination with other bands).

Notification of Donors

If the repeat ELISA test is positive or if other tests are positive, it is the responsibility of the collection facility to ensure that the donor is notified. The information should be given to the donor by an individual especially aware of the sensitivities involved. At present, the proportion of these seropositive donors who have been infected with HTLV-III is not known. It is, therefore, important to emphasize to the donor that the positive result is a preliminary finding that may not represent true infection. To determine the significance of a positive test, the donor should be referred to a physician for evaluation. The information should be given to the donor in a manner to ensure confidentiality of the results and of the donor's identify.

Maintaining Confidentiality

Physicians, laboratory and nursing personnel, and others should recognize the importance of maintaining confidentiality of positive test results. Disclosure of this information for purposes other than medical or public health could lead to serious consequences for the individual. Screening procedures should be designed with safeguards to protect against unauthorized disclosure. Donors should be given a clear explanation of how information about them will be handled. Facilities should consider developing contingency plans in the event that disclosure is sought through legal process. If donor deferral lists are kept, it is necessary to maintain confidentiality of such lists. Whenever appropriate, as an additional safeguard, donor deferral lists should be general, without indication of the reason for inclusion.

Medical Evaluation

The evaluation might include ELISA testing of a follow-up serum specimen and Western blot testing, if the specimen is positive. Persons who continue to show serologic evidence of HTLV-III infection should be questioned about possible exposure to the virus or possible risk factors for AIDS in the individual or his/her sexual contacts and examined for signs of AIDS or related conditions, such as lymphadenopathy, oral candidiasis, Kaposi's sarcoma, and unexplained weight loss. Additional laboratory studies might include tests for other sexually transmitted diseases, tests of immune function, and where available, tests for the presence of the virus, such as viral culture. Testing for antibodies to HTLV-III in the individual's sexual contacts may also be useful in establishing whether the test results truly represent infection.

RECOMMENDATIONS FOR THE INDIVIDUAL

An individual judged most likely to have an HTLV-III infection should be provided the following information and advice:

1. The prognosis for an individual infected with HTLV-III over the long term is not known. However, data available from studies conducted among homosexual men indicate that most persons will remain infected.
2. Although asymptomatic, these individuals may transmit HTLV-III to others. Regular medical evaluation and follow-up is advised, especially for individuals who develop signs or symptoms suggestive of AIDS.
3. Refrain from donating blood, plasma, body organs, other tissue, or sperm.
4. There is a risk of infecting others by sexual intercourse, sharing of needles, and possibly, exposure of others to saliva through oral-genital contact or intimate kissing. The

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efficacy of condoms in preventing infection with HTLV-III is unproven, but the consistent use of them may reduce transmission.

5. Toothbrushes, razors, or other implements that could become contaminated with blood should not be shared.
6. Women with a seropositive test, or women whose sexual partner is seropositive, are themselves at increased risk of acquiring AIDS. If they become pregnant, their offspring are also at increased risk of acquiring AIDS.
7. After accidents resulting in bleeding, contaminated surfaces should be cleaned with household bleach freshly diluted 1:10 in water.
8. Devices that have punctured the skin, such as hypodermic and acupuncture needles, should be steam sterilized by autoclave before reuse or safely discarded. Whenever possible, disposable needles and equipment should be used.
9. When seeking medical or dental care for intercurrent illness, these persons should inform those responsible for their care of their positive antibody status so that appropriate evaluation can be undertaken and precautions taken to prevent transmission to others.
10. Testing for HTLV-III antibody should be offered to persons who may have been infected as a result of their contact with seropositive individuals (e.g., sexual partners, persons with whom needles have been shared, infants born to seropositive mothers).

Revised recommendations will be published as additional information becomes available and additional experience is gained with this test.

Reported by Centers for Disease Control; Food and Drug Administration; Alcohol, Drug Abuse, and Mental Health Administration; National Institutes of Health; Health Resources and Services Administration.

References

1. CDC. Prevention of acquired immune deficiency syndrome (AIDS): Report of inter-agency recommendations. MMWR 1983; 32:101-3.
2. Gallo RC, Salahuddin SZ, Popovic M, et al. Frequent detection and isolation of cytopathic retroviruses (HTLV-III) from patients with AIDS and at risk for AIDS. Science 1984;224:500-3.
3. Barré-Sinoussi F, Chermann JC, Rey F, et al. Isolation of a T-lymphotropic retrovirus from a patient at risk for acquired immune deficiency syndrome (AIDS). Science 1983;220:868-71.
4. Levy JA, Hoffman AD, Kramer SM, Landis JA, Shimabukuro JM, Oshiro LS. Isolation of lymphocytopathic retroviruses from San Francisco patients with AIDS. Science 1984;225:840-2.
5. Sarngadharan MG, Popovic M, Bruch L, Schüpbach J, Gallo RC. Antibodies reactive with human T-lymphotropic retroviruses (HTLV-III) in the serum of patients with AIDS. Science 1984;224-506-8.
6. Safai B, Sarngadharan MG, Groopman JE, et al. Seroepidemiological studies of human T-lymphotropic retrovirus type III in acquired immunodeficiency syndrome. Lancet 1984;1:1438-40.
7. Laurence J, Brun-Vezinet F, Schutzer SE, et al. Lymphadenopathy associated viral antibody in AIDS. N Engl J Med 1984;311:1269-73.
8. Melbye M, Biggar RJ, Ebbesen P, et al. Seroepidemiology of HTLV-III antibody in Danish homosexual men: prevalence, transmission, and disease outcome. Brit Med J 1984; 289:573-5.
9. CDC. Antibodies to a retrovirus etiologically associated with acquired immunodeficiency syndrome (AIDS) in populations with increased incidences of the syndrome. MMWR 1984; 33:377-9.
10. Weiss SH, Goedert JJ, Sarngadharan MB, et al. Screening test for HTLV-III (AIDS agent) antibodies: specificity, sensitivity, and applications. JAMA 1985; 253:221-5.
11. Goedert JJ, Sarngadharan MG, Biggar RJ, et al. Determinants of retrovirus (HTLV-III) antibody and immunodeficiency conditions in homosexual men. Lancet 1984;2:711-16.
12. Spire TJ, Des Jarlais DC, Marmor M, et al. Prevalence of antibody to lymphadenopathy-associated virus among drug-detoxification patients in New York. N Engl J Med 1984;311:467-8.
13. Ramsey RB, Palmer EL, McDougal JS, et al. Antibody to lymphadenopathy-associated virus in hemophiliacs with and without AIDS. Lancet 1984;2:397-8.
14. Tsoukas C, Gervais F, Shuster J, Gold P, O'Shaughnessy M, Robert-Guroff M. Association of HTLV-III antibodies and cellular immune status of hemophiliacs. N Engl J Med 1984;311:1514-15.
15. Harris CA, Cabradilla C, Klein RS, et al. Antibodies to a core protein (p25) of lymphadenopathy associated virus (LAV) and immunodeficiency in heterosexual partners of AIDS patients. Presentation at 24th Interscience Conference on Antimicrobial Agents and Chemotherapy. Washington, D C., 1984.

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16. Anonymous. Needlestick transmission of HTLV-III from a patient infected in Africa. Lancet 1984; 2:1376-7.
17. Salahuddin SZ, Groopman JE, Markham PD, et al. HTLV-III in symptom-free seronegative persons. Lancet 1984; 2:1418-20.
18. Groopman JE. Unpublished data.
19. Groopman JE, Salahuddin SZ, Samgadharan MG, et al. HTLV-III in saliva of people with AIDS-related complex and healthy homosexual men at risk for AIDS. *Science* 1984; 226:447-9.
20. Zagury D, Bernard J, Leibowitch J, et al. HTLV-III in cells cultured from semen of two patients with AIDS. Science 1984;226:449-51.
21. Feorino PM, Jaffe HW, Palmer E, et al. Transfusion-associated acquired immunodeficiency syndrome: evidence for persistent infection in blood donors. Submitted for publication.
22. Darrow WW, Jaffe HW, Braff E, et al. Acquired immunodeficiency syndrome (AIDS) in a cohort of homosexual men. Presentation at 24th Interscience Conference on Antimicrobial Agents and Chemotherapy. Washington, D.C., 1984.
23. Tsang VCW, Peralta JM, Simons AR. Enzyme-linked immunoelectrotransfer blot techniques (EITB) for studying the specificities of antigens and antibodies separated by gel electrophoresis. Methods Enzymol 1983;92:377-91.

Poliomyelitis — Finland

As of January 9, 1985, four cases of paralytic and one case of nonparalytic poliomyelitis had been diagnosed and confirmed during the previous 2 months from various parts of Finland, including the vicinities of Helsinki and Turku. The outbreak apparently began in late October 1984, when a 6-year-old boy developed aseptic meningitis; type 3 poliovirus was isolated from his stool. In mid-November, paralytic poliomyelitis occurred in a 17-year-old male who had previously received five doses of inactivated poliomyelitis vaccine (IPV). Subsequently, three other cases of paralytic poliomyelitis were diagnosed from mid-November to mid-December. One patient, a 12-year-old boy, had previously received five doses of IPV; one, a 31-year-old pregnant woman, was unvaccinated; and one, a 33-year-old man with Hodgkin's disease, was incompletely immunized. Poliovirus type 3 was isolated from stool specimens of all four individuals with paralytic disease; these isolates have been characterized as "not vaccine-like" by the method of van Wezel (*1*). Poliovirus type 3 has also been isolated from approximately 15% of 700 stool samples or throat swabs from children without clinical illness, most of whom were residents of communities with cases.

Since 1960, routine vaccination against poliomyelitis using IPV has been performed in Finland. Before this outbreak, paralytic poliomyelitis was last reported in Finland in 1964. Sewage surveys conducted from 1971-1981 had failed to detect any poliovirus. Epidemiologic investigations are currently being conducted. All children 6 months to 18 years old have been given an additional dose of IPV. Vaccination of the entire population with oral poliomyelitis vaccine (OPV) is to begin soon.

Reported by National Board of Health, Government of Finland; Div of Immunization, Center for Prevention Svcs, CDC.

Editorial Note: In developed countries, such as Japan, Australia, New Zealand, Canada, and the countries of industrialized Europe, the risk of acquiring poliomyelitis is usually no greater than in the United States. In contrast, all developing countries should generally be considered endemic for poliomyelitis. Proof of poliomyelitis immunization is not required for international travel. However, the Immunization Practices Advisory Committee (ACIP) recommends that travelers to countries where poliomyelitis is occurring—which now includes Finland—be immunized. Schedules for primary immunization against poliomyelitis require three or more doses. In general, OPV is the vaccine of choice for persons under 18 years of age. Unimmunized adults (18 years and older) should receive at least two doses of IPV, 4 or more weeks apart, and preferably a complete primary series, before traveling; if an individual's travel plans

CONFIDENTIAL

NOT FOR PUBLICATION EAGA 2

EXPERT ADVISORY GROUP ON ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS) - BACKGROUND PAPER

Introduction

In 1981 an apparently new disease appeared in the USA after separate reports of Pneumocystis carinii pneumonia and Kaposi's sarcoma occuring in homosexual men. This disease became known as Acquired Immune Deficiency Syndrome (AIDS) which is defined by Centres for Disease Control (CDC) Atlanta, USA as:

1. A reliably diagnosed disease that is at least moderately indicative of an underlying cellular immune deficiency. For example, Kaposi's sarcoma in a patient aged less than 60 years or opportunist infection.

2. No known underlying cause of the cellular immune deficiency nor any other cause of reduced resistance reported to be associated with the disease.

Up to 31 December 1984, 7699 cases and 3665 deaths (48 per cent) had been reported in the USA.

Aids in the UK

The first case of AIDS in the UK was reported in December 1981 and an AIDS surveillance system was set up shortly afterwards at the Communicable Disease Surveillance Centre (CDSC) Colindale and the Communicable Disease(Scotland) Unit (CD(S)U). Up to 31 December 1984, 108 cases and 46 deaths had been reported in the UK. (See attached tables for epidemiological details based on data from CDSC.)

Age and Sex

Cases have occurred in patients ranging in age from 20 to 57 years (Median 36 years), only 6% were female, 2 of whom were black Africans. There were 2 cases in males from the Caribbean and the remainder were white Caucasians.

Risk Factors

91% of the cases were in male homosexuals. Eight cases were in heterosexual males, three in patients with haemophilia A who had received imported Factor VIII concentrate and five were heterosexual men with no usual risk factors but two of them had visited the Caribbean within 5 years of becoming ill. One case was both an IV drug abuser and homosexual.

Mode of Transmission

AIDS is believed to be transmitted by sexual contact, through transfusion of blood and use of certain blood products. In the USA and UK this has been mainly through homosexual contact, although there is increasing evidence that AIDS may have been endemic for many years in some central African countries (e.g Zaire) and that transmission may also occur by heterosexual intercourse. The development of AIDS after initial infection is thought to take an average of two years but in some cases it takes longer possibly up to five years.

Human T Cell Lymphotropic Virus III (HTLV III)

It is now accepted that the retrovirus isolates HTLV III human T cell lymphotropic virus and LAV - lymphadenopathy associated virus are similar and are probably the causative agent of AIDS either singly or in association with other unknown agents or factors. The virus has been isolated in lymphocytes in patients with AIDS and found in blood, saliva and semen.

Development of Tests for HTLV III

Since the first isolation of HTLV III in 1984 numerous publicatiosn describing the prevalence of antibody in high risk groups have appeared. As far as the UK is concerned the study by the team led by Professor Weiss at the Chester Beatty Institute and Dr Richard Tedder at the Middlesex Hospital using a competitive radioimmunoassay (RIA) is of major interest. They reported+-

> 'Two thousand person in the UK were examined for antibodies to HTLV III. Of patients with AIDS, 30/31 were sero-positive as were 89 per cent of patients with persistent generalised lymphadenopathy, 17 per cent symptomless homosexual men, 34 per cent haemophiliacs receiving pooled clotting factors and 1.5 per cent intravenous drug abusers. None of more than a thousand unselected blood donors was sero-positive.'

Since this study, further antibody tests have been undertaken mainly in haemophiliacs, recipients of whole blood and other blood products. Some population studies are being undertaken at PHLS.

Significance of the HTLV III Antibody Test

The test identifies antibody in an individual who has been exposed to the virus. A positive test is not diagnostic or AIDS since most people who sero covert will not necessarily develop the syndrome. Neither does a positive test necessarily indicate protection or exclude a carrier state, since the antibodies are not neutralizing. A viremia is presumed to precede the development of antibody. It is not yet known how rapidly seroconversion occurs after infection.

Availability of HTLV III Antibody Test

The test is available in two centres at present namely the Middlesex Hospital and at the Central Public Health Laboratory Colindale. Commercial development of the test is underway and it is hoped that the test will be more widely available by the spring. The screening of blood donors by Regional Blood Transfusion Centres is seen as a priority.

Safety of Blood Transfusion

At present blood transfusion in the United Kingdom carries a very small risk of transmitting AIDS virus. This risk will be reduced when all blood donors are screened for the presence of HTLV III antibody. Even then there will be a small risk of transmitting the AIDS virus if the donor is recently infected and has not yet sero converted. A test for the antigen would be the ideal solution but this has not been developed yet. Transfusion Centres are currently excluding high risk groups from

donating blood by the use of publicity and leaflets.

One donor who is now suffering from AIDS has donated on three occasions in the last two years. The recipients of the red cells from these donations have all sero converted. Plasma from one of the donations was added to a pool of plasma used to make a batch of Factor VIII. Thirty eight patients with haemophilia were treated with this batch of Factor VIII before it could be withdrawn.

The Blood Products Laboratory intends to heat treat all the Factor VIII it manufactures from April this year. Commercial firms producing heat treated Factor VIII have been invited to submit license variation applications to the CSM for approval.

Health Education

The UK is increasing its activity to provide health education about AIDS and the sexually transmitted diseases generally. The Health Education Council is revising its leaflets on STDS and a new leaflet on AIDS has been published (copy attached). Other health education activities are carried out by voluntary and self help groups. The Gay Switchboard has established an open 24 hour general enquiry service. The Terrence Higgins Trust, a charity founded to provide assistance to homosexuals with AIDS, has asked in the supplement to its leaflet addressed to homosexuals (copies attached) that readers of the leaflet do not carry organ donor cards. Haemophilia Reference Centre Directors have agreed to ask their patients not to carry cards. DHSS has produced a leaflet on AIDS which is distributed through blood transfusion centres. A revised version of the leaflet (copy of draft attached) will be individually given to every blood donor.

Research

The Medical Research Council has set up a Working Group on AIDS. This co-ordinates research on AIDS in the UK and five projects are currently under way, two of which are supported by DHSS. The MRC and the Health departments sponsor research on other sexually transmitted diseases. The Chairman of the MRC working group, Dr D Tyrrell, and Dr S Galbraith, Director of the Communicable Disease Surveillance Centre, are the UK national co-ordinators on the EC working group on AIDS. This was set up following a recent call by the European Parliament for an emergency programme of research on AIDS as part of the EC's medical and public health research programme.

International Co-operation

The UK is co-operating with other countries in the pooling of knowledge about AIDS including the WHO AIDS Reference Centre for Europe (in Paris) and also with colleagues in the USA.

Advisory Committee on Dangerous Pathogens

Interim guidelines on AIDS have been drawn up by the joint DHSS/HSE ACDP. The guidelines represent the considered view of the ACDP at this time of the hazards, the level of risk associated with those hazards and the protective measures appropriate to those risks. The guidelines were published on the 16 January (copy attached).

DHSS
January 1985

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

UNITED KINGDOM

Age, sex and ethnic origin 1982 to December 31st, 1984

Age	Male		Female		Total
	Caucasian	Other	Caucasian	Other	
20	0	-	-	-	0
20-29	14	1*	-	1	16
30-39	40	-	1	-	41
40-49	37	-	2	1	40
50-59	8	1	1	-	11
60 & over	-	-	-	-	0
Total	100	2	4	2	108

*Caribbean

CDSC

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

UNITED KINGDOM

Disease category 1982 to December 31st, 1984

Category	Cases	Deaths
Kaposi's sarcoma (KS)	34	9
Pneumocystis carinii pneumonia (PCP)	40	20
KS + PCP	8	3
Other opportunistic infections	24	12
Cerebral lymphoma	2	2
Total	108	46

CDSC

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

UNITED KINGDOM

Risk group and sex

Reports received by December 31st, 1984

Risk group	Male	Female	Total Cases	Total Deaths
Homosexual/bisexual	93	0	93	37
Haemophiliac	3	0	3	2
African	1	3	4	4
Other and unknown	5	3	8	3
Total	102	6	108	46

CDSC.

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

UNITED KINGDOM

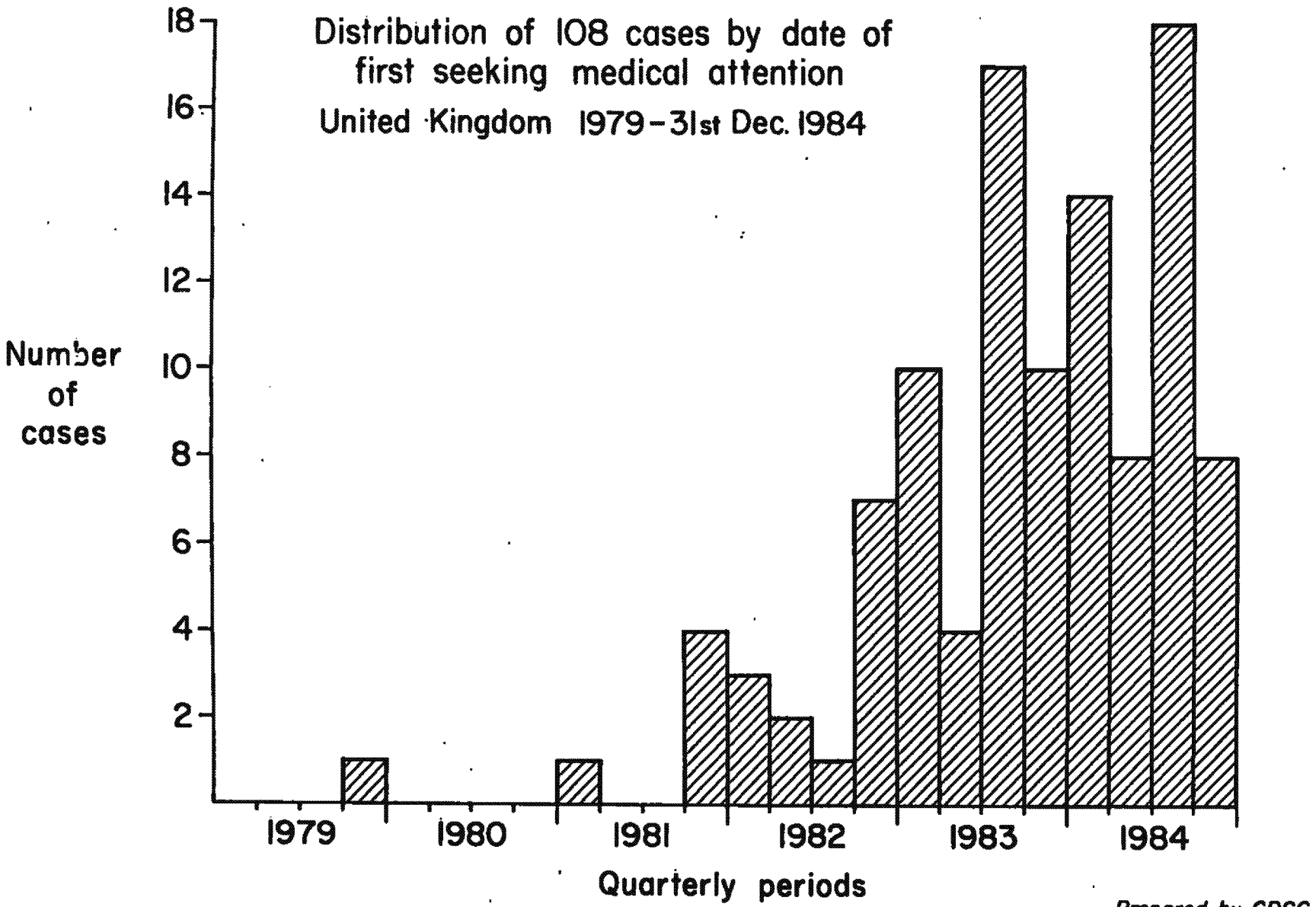
Geographical distribution

Reports received to December 31st, 1984

Area	Homosexual or bisexual	Other	Total
London	76	5	81
South coast	7	1	8
Bristol	1	1	2
Cardiff	1	2	3
North-west	4	1	5
Mersey	0	1	1
Oxford	1	1	2
South West	1	0	1
Northern	1	1	2
Scotland	1	2	3
Total	93	15	108

CDSC

AQUIRED IMMUNE DEFICIENCY SYNDROME



Prepared by CDSC

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NATIONAL SURVEILLANCE OF AIDS AND HTLV3 INFECTION - CDSC

The national surveillance of AIDS in the United Kingdom is carried out by the Communicable Disease Surveillance Centre (CDSC) in association with the Communicable Diseases (Scotland) Unit (CD(S)U) and an additional national scheme for the surveillance of HTLV3 infection is proposed. These activities of CDSC and CD(S)U are briefly described below.

Surveillance of AIDS

The national surveillance of AIDS began in 1982 and comprises the collection of reports from clinicians of suspected cases by CDSC or CD(S)U, of reports from microbiologists of opportunistic infections and of copies of death certificates mentioning AIDS or Kaposi's Sarcoma from the Office of Population Censuses and Surveys. Whenever possible reported cases have been interviewed by the same member of CDSC medical staff. Monthly and annual reports of analyses of these data have been included in the Communicable Disease Report (CDR) and published in the British Medical Journal. Standard tabulations of the data are provided by CDSC on request.

This surveillance scheme has been very successful; it is particularly gratifying to note that all 108 cases reported to date have been reported by clinicians. That is, no cases have come to notice through the other two reporting systems which has not already been reported by clinicians.

Case-control study of AIDS

A case-control study to determine risk factors for AIDS in the United Kingdom began in 1983 and so far 6 cases and 10 controls have been included in the study. The cases for study are ascertained by the national surveillance scheme described above and for each case attempts are made to select four controls, two from local clinic groups and two from local social groups. It is hoped to complete this study with 50 cases and their controls by the end of 1985 or early 1986.

Surveillance of exposed persons

In January 1985 CDSC and the Association of Medical Microbiologists began a prospective clinical and serological study of health care workers accidentally exposed to blood or body fluids of patients who have or may have HTLV3 infection. Microbiologists have been asked to report such exposures to CDSC, when the event will be documented in a standard way and a five-year follow-up initiated and coordinated.

Tracing of possibly HTLV3 contaminated blood or blood products

When CDSC becomes aware that a patient with AIDS has donated or received blood within five years before onset of symptoms the Director of the appropriate regional blood transfusion centre is informed of the details, personally and in strict confidence, so that the recipients or donors can be traced. The policy adopted on the examination, counselling and follow-up of these recipients and donors has hitherto been decided locally in each case.

CDSC has undertaken to inform the appropriate regional directors in the same way of all cases of AIDS and HTLV3 antibody positive persons reported nationally so that donor records may be checked and enquiries made about any recipients. This investigation has been limited because in many cases of AIDS the name and address are not known to CDSC, and it is unlikely to be extended to HTLV3 antibody positive persons in the future because it may not be acceptable to collect nationally their names and addresses.

Laboratory reporting of HTLV3 infection

CDSC intends to ask microbiologists to report information about HTLV3 antibody positive persons, beginning as soon as possible. The purpose is to describe national and regional trends in the infection, in time, geographically and in 'risk' groups. The data which microbiologists will be asked to provide include name of laboratory and date of receipt of specimen, age, sex, main clinical feature and 'risk' group of the persons.

N.S. Galbraith
Director, CDSC
17th January, 1985.