

SURVEILLANCE OF THE ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS) IN THE UNITED KINGDOM, JANUARY 1982 - JULY 1983

Introduction

Since 1981, there have been many reports from the United States of America of previously uncommon diseases, notably Kaposi's sarcoma and *Pneumocystis carinii* pneumonia, in young, homosexual men^{1,2,3,4,5}. During that year and the later part of 1980, the Centers for Disease Control (CDC), Atlanta, noted an increased number of requests for pentamidine, a drug used in the treatment of *Pneumocystis carinii* pneumonia and, on investigation, discovered that many of these requests were for homosexual patients or intravenous drug abusers⁶. Subsequently the syndrome of Kaposi's sarcoma/*P. carinii* pneumonia and other opportunistic infections was described in other groups, including haemophiliacs, other recipients of blood products and Haitians^{7,8,9}, and was named the Acquired Immune Deficiency Syndrome (AIDS).

In December 1981 a case of AIDS in a homosexual was described in England¹⁰. In September 1982 a surveillance scheme to monitor Kaposi's sarcoma and opportunistic infections in the United Kingdom was set up by the Communicable Disease Surveillance Centre (CDSC) in collaboration with the Communicable Diseases (Scotland) Unit (CD(S)U)¹¹. This report describes the scheme and the results up to 31 July 1983. It includes retrospective data from 1 January 1982.

Objectives

The objectives of the surveillance scheme are:-

- 1) to detect AIDS in the United Kingdom and to monitor trends in its incidence;
- 2) to describe the basic epidemiology of the condition;
- 3) to provide information for those undertaking research in AIDS.

Definitions and identifications

Kaposi's sarcoma is a multifocal, metastasizing, malignant reticulosis with features resembling those of angiosarcoma, principally involving the skin, although visceral lesions are sometimes observed¹². Until recently the disease was rare in Europe and North America, occurring mainly amongst elderly men of Jewish, Italian or Greek ancestry and running a protracted course. Since 1934 a more aggressive form of the disease, with visceral involvement, has been reported¹³ in equatorial Africa amongst young men. In 1978 Kaposi's sarcoma was described in renal transplant patients¹⁴, and also in others who were iatrogenically immunosuppressed¹⁵. Its occurrence in young homosexual men was recognised in 1981¹. Although cases of all types of Kaposi's sarcoma are included in the UK reporting scheme, only those coming within the definition of AIDS were included in the analysis.

Acquired Immune Deficiency Syndrome (AIDS): the definition compiled by CDC was adopted:

"For the limited purposes of epidemiologic surveillance, CDC defines a case of the Acquired Immune Deficiency Syndrome (AIDS) as a person who has had:

- 1) a reliably diagnosed disease that is at least moderately indicative of an underlying cellular immune deficiency (such as an opportunistic infection, or Kaposi's sarcoma in a person aged less than 60 years), but who, at the same time, has had:
- 2) no known underlying cause of cellular immune deficiency, nor any other cause of reduced resistance reported to be associated with that disease".

This is a practical and sensitive definition, which is made more specific by stating the diseases considered to be at least moderately indicative of cellular immune deficiency and the known causes of reduced resistance reported to be associated with particular diseases.

Extended Lymphadenopathy Syndrome: unexplained lymphadenopathy in two or more extra-inguinal sites for more than three months with fever, malaise, night sweats, weight loss and hepatosplenomegaly¹⁶.

This syndrome was not included in the UK surveillance scheme because of the current doubt about its significance. However, cases of extended lymphadenopathy syndrome reported as suspected AIDS, but which on investigation did not meet the CDC criteria were documented for subsequent follow-up.

Sources of reports

At the inception of the UK surveillance scheme there were three sources of reports:

- 1) Office of Population, Censuses and Surveys. In 1982 it was arranged that copies of death certificates mentioning Kaposi's sarcoma or AIDS would be sent to CDSC.
- 2) Laboratories. In November 1982, microbiologists were asked to continue to report opportunistic infections on routine laboratory report forms but in addition, to add information on the sexual orientation of the patient, when the condition appeared to come within the definition of AIDS.
- 3) Venereologists and dermatologists. In September 1982 consultants in England and Wales were approached by letter and invited to report cases of AIDS to CDSC.

By March 1983, only 6 cases of AIDS had been reported, although several cases of classical Kaposi's sarcoma were included in the data received. Because it was thought that this small number might be due to under-reporting, it was decided to extend the surveillance scheme by inviting doctors working in all branches of medicine to report the syndrome and appeals to them were made by letter in the British Medical Journal and Lancet^{17,18}.

Data collection

On receipt of a report, a surveillance questionnaire similar to that designed by CDC, Atlanta was completed by the individual reporting the case. Questions covered case definition and basic epidemiological details. In cases of difficulty, a visit was made by an epidemiologist from CDSC.

Results

By 31 July 1983, 14 cases of AIDS had been reported to CDSC, mainly from clinicians (table 1). All the patients were caucasian males. There were 6 cases of Kaposi's sarcoma without pneumocystis, 5 cases of pneumocystis pneumonia without Kaposi's sarcoma and 3 cases of other opportunistic infections (table 2). The opportunistic infections were toxoplasmosis and cytomegalovirus in 2 patients and oesophageal candidiasis in the third.

Table 1 CDSC AIDS surveillance : sources of cases

Source of reports	Number	Deaths
OPCS deaths (Kaposi's sarcoma)	2	2
Laboratory	2	0
Clinicians	10	3

Table 2 CDSC AIDS surveillance : disease reported

Kaposi's sarcoma without <i>Pneumocystis carinii</i> pneumonia	6
<i>Pneumocystis carinii</i> pneumonia without Kaposi's sarcoma	5
Both Kaposi's sarcoma and <i>Pneumocystis carinii</i> pneumonia	0
Opportunistic infection without Kaposi's sarcoma or <i>Pneumocystis carinii</i> pneumonia	3

Cases ranged in age from 20-45 years with a median of 39 years (table 3). The youngest patient had haemophilia A. There were 5 deaths, 2 from Kaposi's sarcoma and 3 from pneumocystis pneumonia, all in homosexual patients aged between 35 and 45 years.

Table 3 CDSC AIDS surveillance : ages of reported cases, all males

<20 years	20-29 years	30-39 years	40-49 years	>50 years
0	3	5	6	0

Of the 14 cases 12 were homosexual, one was also a drug abuser; 10 were reported from London, 1 from Bristol and 1 from Oxford. The haemophiliac patient was from Wales, and had received Factor VIII imported from the USA; a patient from Lancashire did not come within the known risk groups.

Seven patients are thought to have had sexual contact with Americans. Two of the homosexual men reported to the scheme had had sexual contact with each other. No cases were reported in laboratory staff or others working in other areas of health care.

Discussion

There were 1,831 cases of AIDS reported in the USA up to 11 July 1983. The American epidemic curve showed an exponential increase in 1982, but no such rise was evident in the UK up to July 1983. As 7 of the 14 British cases had sexual contact with American nationals, the current picture here is mainly a reflection of the American epidemic rather than an indication of spread in this country. Although numbers are small the proportion of British cases seen in homosexuals (10/14, 71%) was similar to that seen in the USA (1300/1831, 71%). Most of the British homosexual cases were in London and most of the cases in the USA were in major conurbations, 800 of them in New York City. This may be due to congregation of large numbers of homosexuals in cities, and the fact that their life style in these places includes group sexual practices and multiple sexual partners^{19,20}, thought to be important in the development of AIDS. If such practices are unusual in the UK and the homosexual community does not adopt them, then the spread of the syndrome in this country may remain limited.

Only one case has been seen in the UK in a patient with haemophilia, out of a population of approximately 2,167 patients receiving treatment for this condition. Although the risk from blood products imported into the UK seems at present very small, nevertheless importation of these products should be restricted to material obtained from donors outside the epidemic foci in the USA and from donors who are not in known risk groups. Future supplies of Factor VIII for this country will be manufactured only from plasma collected in accordance with the US Food and Drug Administration regulations which were designed to exclude plasma donations from donors from high risk groups.

Summary

Between 1 January 1982 and 31 July 1983, 14 cases of AIDS, consistent with the CDC definition, were reported in the UK. Although this may under-represent the incidence of the syndrome, it nevertheless provides no evidence of a UK epidemic - indeed, 7 of the cases were known to have had contact with US nationals, suggesting that the present UK situation is simply part of the American epidemic.

The reporting of AIDS and suspected AIDS by microbiologists, venereologists, dermatologists and other clinicians has proved valuable in monitoring the syndrome and we are most grateful for their cooperation. We should like to ask them and all other laboratory doctors and clinicians to inform CDSC (01-200 6868) or CD(S)U (041-946 7120), if they become aware of possible cases of AIDS in the future.

Prepared by PHLS Communicable Disease Surveillance Centre, Colindale.

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