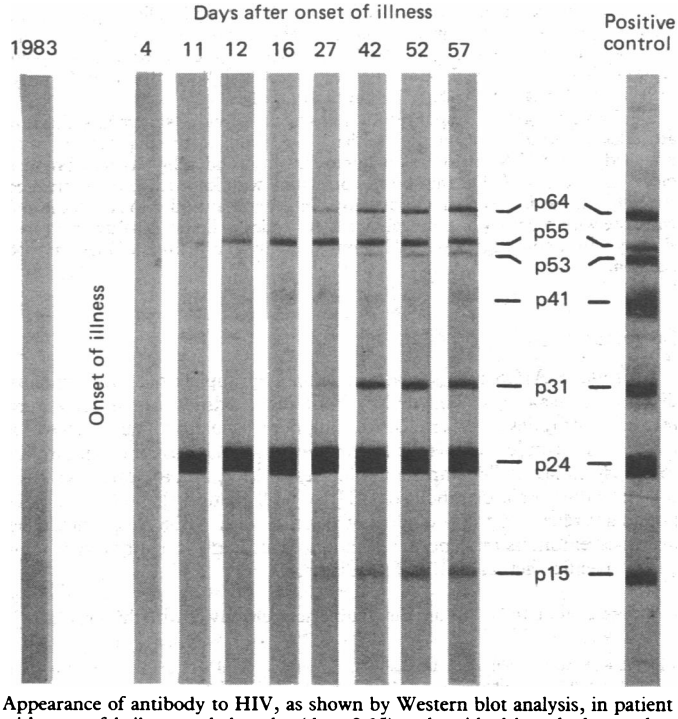
appeared earliest, as previously reported,[4 5] and before day 11 of illness, coincident with the appearance of activated lymphocytes. Antienvelope protein antibodies, p41, and gp120/160 (data not shown; Gerald Robey) were first detected faintly at day 16, coincident with clinical improvement.



Appearance of antibody to HIV, as shown by Western blot analysis, in patient with acute febrile encephalopathy (days 2-15) and residual lymphadenopathy. Western blot analysis was performed with HIV grown in H9 cell lines. Serum obtained during the illness was analysed in the same tray using an avidin-biotin-peroxidase technique to show antibody attachment to HIV polypeptides.[4] Serum from 1983 was available from a previous study.

Antibodies against other antigens (p15, p31, p53, p64) appeared before day 27, coincident with the development of persistent generalised lymphadenopathy. Thus severe symptoms including an illness similar to mononucleosis, encephalopathy, and persistent generalised lymphadenopathy may occur as a consequence of primary HIV infection. Whether this profile development of antibody to HIV is typical of other seroconversions remains unknown.

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Transient ascites in progressive systemic sclerosis

The differential diagnosis for ascites of sudden onset is extensive.[1] We report transient ascites in two patients with progressive systemic sclerosis.

Case 1

A 64 year old woman had a 17 year history of progressive systemic sclerosis, manifested by Raynaud's syndrome, sclerodactyly, calcinosis, telangiectasia, and dysphagia. She developed tense ascites over three days, with oedema to mid-abdomen. No other abnormal clinical findings were present. Treatment was with penicillamine 300 mg, nifedipine retard 40 mg, and inositol nicotinate 2 g daily. Haemoglobin and electrolyte concentrations, erythrocyte sedimentation rate, and results of liver function tests (including prothrombin time and albumin concentration) were normal. α Fetoprotein and carcinoembryonic antigen were not detected. The anticentromere antibody titre was positive. Ascitic fluid contained 12 g protein/l, and the cell count was 80×10^6 cells (predominantly lymphocytes)/l. Gram staining, culture, and cytological examination yielded negative results. Urine did not contain any protein. A chest *x* ray film, echocardiogram, isotope liver scan, and hepatic phlebogram were normal. Ultrasonography and computed tomography of the abdomen confirmed ascites; findings were otherwise normal. Barium studies showed abnormalities of the oesophagus, stomach, small bowel, and proximal colon consistent with progressive systemic sclerosis. Endoscopic biopsy of the oesophagus, stomach, and jejunum did not show any evidence of malignancy.

The oedema and ascites resolved with diuretic treatment and had not recurred 18 months later (July 1986), when she was no longer taking diuretics, though the other drugs were maintained at the same dose.

Case 2

A 59 year old woman developed ascites over six weeks. She had facial telangiectasia and sclerodactyly. At laparotomy 6 litres of straw coloured fluid was removed. The liver was normal, and biopsy was performed. A "fine white mesh like appearance" of the small bowel was noted at operation. Haemoglobin and electrolyte concentrations, erythrocyte sedimentation rate, and results of liver function tests were normal. The anticentromere antibody titre was positive. Carcinoembryonic antigen was not detected, and the α fetoprotein concentration was 204 kU/l (normal <15 kU/l). Results of histological examination of the liver biopsy specimen, 24 hour urinary protein excretion, and a chest *x* ray film were normal. Radiography of the hands showed calcinosis circumscripta. Barium studies showed diminished oesophageal peristalsis, dilatation of the small bowel from mid-jejunum to ileum, and normal large bowel. Ultrasonography of the abdomen showed patent hepatic veins and no abnormality of the liver. α Fetoprotein concentration at three months and subsequently was <5 kU/l.

Nineteen months later the ascites had not recurred and she was otherwise well; she was not receiving any treatment.

Comment

These patients with progressive systemic sclerosis presented with ascites of recent onset. Extensive investigation excluded recognised causes of ascites, including liver disease, the Budd-Chiari syndrome, right heart failure, constrictive pericarditis, the nephrotic syndrome, and occult malignancy. Only one other case of otherwise unexplained ascites has been reported in a patient with progressive systemic sclerosis, who was positive for hepatitis B surface antigen and had exudative ascites with unexplained bony erosions.[2] No follow up information was given, and it is difficult to exclude recognised causes of ascites. In other series of patients with progressive systemic sclerosis ascites has been reported only in association with hepatic fibrosis[3] and cirrhosis.[4]

Pleural and pericardial fibrosis and effusions are well recognised in progressive systemic sclerosis and have been shown at necropsy to be associated with serositis.[3-5] One detailed necropsy study, however, showed that peritonitis and peritoneal adhesions were no more common in 57 patients with progressive systemic sclerosis than in controls.[5] Abnormalities of the bowel wall are well recognised in progressive systemic sclerosis and were documented in our patients; low grade peritoneal inflammation might well result in ascites in such patients. As the ascites resolved rapidly the causative factor was presumably transient. We suggest that the differential diagnosis of ascites in progressive systemic sclerosis should include this apparently benign condition, which responds to medical management.

We thank Mr D J Pinto, consultant surgeon, Tyrone County Hospital, Omagh, County Tyrone, for referring case 2 and for permission to report his findings at laparotomy.

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Attitudes to and knowledge about the acquired immune deficiency syndrome: lack of a correlation

The acquired immune deficiency syndrome (AIDS) is a controversial disease about which there is much public ignorance and confusion. A recent government advertising campaign attempted to inform the general public about the disease's aetiology, epidemiology, and prognosis. Such advertising presumes that the provision of factual information will modify attitudes towards the disease. As homosexuals are a stigmatised group within society, however, it is possible that attitudes to the treatment of AIDS are not related to specific knowledge about the disease but are instead a consequence of general attitudes to homosexuality. In this study we examined attitudes among preclinical medical students, whom we may regard as a surrogate for "the educated layman" in that they have a good knowledge of biological principles and are likely to have a high awareness of and interest in issues about AIDS but have not received any specific clinical training about or exposure to the disease and its treatment. If factual information could be effective in modifying attitudes it should be evident in this group.

Method and results

Anonymous questionnaires were distributed at lectures to medical students in their first and second preclinical years at University College London in February 1986. Attitudes were assessed on five point scales (1=strongly disagree; 5=strongly agree). Questions concerned attitudes to homosexuality (18 items modified from previous studies[1 2]), attitudes to AIDS (eight questions; see table), knowledge of AIDS (13 questions, with a total of 36 subitems), religious and political views, and whether the student was homosexual.

Altogether 143 questionnaires were returned, representing 69·8% of those distributed and 55·0% of the students. On the scale for knowledge of AIDS (36 items) the subjects had a mean score of 21·5 correct (SD 6·0, range 1-33). The Spearman-Brown split half reliability, which is calculated from the correlation of scores on odd and even numbered items,[3] was 0·852. The scale for attitude to homosexuality (18 items) had a possible range of scores of 18-90, with an actual mean score of 61·4 (SD 15·7, range 18-89) and reliability of 0·950. High scores indicated a positive attitude towards homosexuals and homosexuality. Religion was scored on a seven point scale,[1] 1 indicating atheists and 7 indicating Christians who attended church one or more times a week; non-Christians were excluded from subanalyses when appropriate. Political views were scored on a five point scale: 1=National Front; 2=Conservative; 3=Liberal, Social Democratic party, or Alliance; 4=Labour; and 5=Communist or far left.

The table shows the responses of subjects to the eight statements showing attitudes to AIDS and the Pearsonian correlation of those responses with knowledge of AIDS, attitudes to homosexuality, and religious and political views. Attitudes to AIDS showed no correlation with knowledge but correlated strongly with attitudes to homosexuality. In general attitudes to AIDS did not correlate with religious or political views. Attitudes to homosexuality correlated slightly with knowledge about AIDS but strongly with politics and less so with religion.

Comment

Attitudes to AIDS and its treatment among a group of preclinical students did not correlate with knowledge about the condition but instead were related to attitudes in general concerning homosexuality. The absence of a relation of attitudes to specific knowledge is a not uncommon finding in social psychology.[4] The implication for health education is clear: if we wish to reduce the "prejudice about AIDS [that] still abound[s]"[5] and to increase public awareness of the problems of patients with AIDS there should be increased emphasis on general education about homosexuality rather than on the specific, factual details of the disease.

We are grateful to Dr A Furnham for his help and advice with this project.

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Relation of eight attitudes to AIDS and its treatment with measures of knowledge about AIDS, attitudes to homosexuality, and measures of religious and political views, and inter-relation of the measures

	No (%) of subjects scoring†:					Correlations			
	1	2	3	4	5	Scale for knowledge of AIDS	Scale for attitudes to homosexuality	Religion	Politics
						Relation of attitudes to AIDS with other measures			
There is likely to be a cure for AIDS in the next **five years**	24 (17)	28 (20)	58 (41)	25 (18)	7 (5)	−0·141	0·087	0·012	−0·009
AIDS is likely to become a relatively common **heterosexual disease**	10 (7)	27 (19)	43 (30)	43 (30)	19 (13)	−0·043	0·038	−0·003	0·038
The only way to control AIDS is to make all homosexual **activity illegal**	87 (62)	30 (21)	10 (7)	9 (6)	4 (3)	−0·110	−0·493***	0·060	−0·305***
AIDS patients present such a threat to society that **they should be compulsorily** detained in hospital as **soon as they are diagnosed**	36 (25)	49 (34)	19 (13)	23 (16)	16 (11)	−0·033	−0·444***	0·056	−0·142
Patients **who have contracted** AIDS through **homosexual activity do not** deserve medical care	116 (81)	15 (11)	3 (2)	3 (2)	6 (4)	−0·012	−0·398***	−0·028	−0·057
Fear of **infection with AIDS will** reduce the quality of care **given to homosexual** patients	10 (7)	19 (13)	20 (14)	67 (47)	27 (19)	−0·031	−0·211*	0·141	0·002
Describing **AIDS as the** "gay plague" is an **overemotional response** to a serious illness	6 (4)	23 (16)	23 (16)	37 (26)	54 (38)	−0·009	0·511***	−0·159	0·209*
More medical research funds should be given to **developing a vaccine against** AIDS	3 (2)	6 (4)	19 (13)	41 (29)	74 (52)	−0·067	0·169	−0·197*	−0·105
						Inter-relation of other measures			
Scale for knowledge of AIDS							0·172	−0·256***	0·132
Scale for attitudes to homosexuality						0·172		−0·287***	0·451***
Religion						−0·256***	−0·287***		−0·188*
Politics						0·132	0·451***	−0·188*	

†1=Strongly disagree, 5=strongly agree. Numbers of subjects do not always total 143 as a few subjects omitted some items.
*p<0·05, ***p<0·001.