- ¹⁴ Hoffman RA, Kung PC, Hansen WP, Goldstein G. Simple and rapid measurement of human T lymphocytes and their subclasses in peripheral blood. *Proc Natl Acad Sci USA* 1980;**77**:4914-7.
- ¹⁵ Greaves MF, Verbi W, Festenstein H, Papasteriadis C, Jaraquemada D, Hayward A. "Ia-like" antigens on human T cells. *Eur J Immunol* 1979; **9**:356-62.
- ¹⁶ Jackson RA, Morris MA, Haynes BF, Eisenbarth GS. Increased circulating Ia-antigen-bearing T cells in type I diabetes mellitus. *N Engl J Med* 1982;**306**:785-8.
- ¹⁷ Bertouch JV, Roberts-Thomson PJ, Bradley J. Diurnal variation of lymphocyte subsets identified by monoclonal antibodies. *Br Med J* 1983;**286**:1171-2.
- ¹⁸ Ritchie AWS, Oswald I, Micklem HS, *et al*. Circadian variation of lymphocyte subpopulations: a study with monoclonal antibodies. *Br Med J* 1983;**286**:1773-5.
- ¹⁹ Alexander GJM, Nouri-Aria KT, Eddleston ALWF, Williams R. Contrasting relations between suppressor-cell function and suppressor-cell number in chronic liver disease. *Lancet* 1983;*ii*:1291-3.
- ²⁰ Schandené L, Vanden Steen F, Romasco F, Wybran J. Active T rosettes human autologous T rosettes, OKT8 and OKT4 cells, Con A-induced suppressive activity and autoantibodies: clinical correlations. *Clin Immunol Immunopathol* 1983;**28**:147-54.
- ²¹ McGregor AM, Petersen MM, McLachlan SM, Rooke P, Smith BR, Hall R. Carbimazole and the autoimmune response in Graves' disease. *N Engl J Med* 1980;**303**:302-7.
- ²² Weetman AP, McGregor AM, Hall R. Methimazole inhibits thyroid auto-antibody production by an action on accessory cells. *Clin Immunol Immunopathol* 1983;**28**:39-45.
- ²³ Weetman AP, McGregor AM, Rennie DP, Hall R. Thyroid hormones fail to influence experimental autoimmune thyroiditis. *Clin Exp Immunol* 1982;**50**:51-4.
- ²⁴ Weetman AP, McGregor AM, Ludgate M, Hall R. The effect of tri-iodothyronine on normal human lymphocyte function. *J Endocrinol* (in press).

(Accepted 1 December 1983)

SHORT REPORTS

Kaposi's sarcoma in a geriatric patient

The traditional view of Kaposi's sarcoma has been of a benign disease presenting as dark blue or purple-brown nodules or plaques on the feet occurring more commonly in southern Europeans and Jews and being 14 times more common among men than women. In homosexual men and other immunocompromised patients, however, the disease has recently been reported to behave like an aggressive lymphoma.¹⁻³ Such a presentation was previously thought common only in equatorial Africa, where children are affected in a way reminiscent of Burkitt's lymphoma. Immunosuppression by prior infection with cytomegalovirus may be an aetiological factor.⁴ The histological features of affected lymph nodes have been described.⁵ I report a case that emphasises that rapidly fatal Kaposi's sarcoma may occur in groups other than the severely immunocompromised.

Case report

A 77 year old Russian Jewish woman presented to the geriatric ward via casualty. She gave a two month history of falls, anorexia, and weight loss and also complained of general malaise and night sweats. She had undergone bowel resection for cancer of the colon 12 years previously. On examination she was feverish and had hepatosplenomegaly with widespread lymphadenopathy in the axillas and groins; external iliac nodes were also palpable. No skin lesions were present.

Full blood count showed moderate macrocytic anaemia. Haemoglobin

concentration was 9.8 g/dl, mean corpuscular volume 104 fl, white cell count $4.6 \times 10^9/l$ with a normal differential, and erythrocyte sedimentation rate 127 mm in the first hour. Chest radiography and routine liver function tests yielded normal results. A random blood glucose concentration was 6.3 mmol/l (114 mg/100 ml). Serum protein electrophoresis showed an increase in α_1 and α_2 globulins and a polyclonal increase in γ globulins. Serum concentrations of vitamin B₁₂ and folate were within normal ranges. Iliac crest bone marrow aspirate and a trephine biopsy specimen showed mild megaloblastosis with no evidence of malignant infiltration. Antibody tests did not show recent infection with a virus, including cytomegalovirus. Histological examination of a biopsy specimen from an axillary lymph node showed reactive hyperplasia with several peripheral foci of Kaposi's sarcoma (figure). Cultures of the lymph node, blood, and bone marrow yielded no micro-organisms.

She was treated as an outpatient with four courses of bleomycin, cyclophosphamide, vincristine, and prednisolone. She made a good initial response, the liver, spleen, and lymph nodes all decreasing in size, but while receiving prednisolone she developed frank diabetes mellitus that required treatment with diet and chlorpropamide. Six months after presentation lymphadenopathy and hepatosplenomegaly recurred, and she was readmitted to hospital and given a fifth course of chemotherapy. Ten days later she developed the physical signs of consolidation in the right lower lobe, confirmed by chest radiography, from which she subsequently died. No causative organism was found on culture of sputum, and permission for necropsy was refused.

Comment

This case is interesting not only because the patient was elderly and female but also because of the aggressive nature of the disease and the absence of skin lesions. Nothing in her history suggested that she had immunosuppression before chemotherapy was started, and nothing suggested a recent viral illness that might have altered her immunity. Her death may have been due to an opportunistic infection, but it coincided with a fall in white cell count after chemotherapy and she also had iatrogenic diabetes mellitus. I suggest that this patient developed Kaposi's sarcoma because of her ethnic background rather than because of an acquired immunodeficiency state.

¹ Hymes KB, Greene JB, Marcus A, *et al*. Kaposi's sarcoma in homosexual men—a report of eight cases. *Lancet* 1981;*iii*:598-600.

² Safai B, Good RA. Kaposi's sarcoma. A review of recent developments. *CA* 1981;**31**:2-12.

³ Friedman-Kien A, Laubenstein L, Marmor M, *et al*. Kaposi's sarcoma and pneumocystic pneumonia among homosexual men—New York City and California. *MMWR* 1981;**30**:305-8.

⁴ Giraldo G, Beth E, Huang ES. Kaposi's sarcoma and its relationship to cytomegalovirus (CMV). III. CMV DNA and CMV early antigens in Kaposi's sarcoma. *Int J Cancer* 1980;**26**:23-9.

⁵ O'Connell KM. Kaposi's sarcoma in lymph nodes: histological study of lesions from 16 cases in Malawi. *J Clin Pathol* 1977;**30**:696-701.

(Accepted 9 November 1983)

Royal Free Hospital, London NW3

N K HARRISON, MA, MRCP, senior house officer

Correspondence to: Dr N K Harrison, Brompton Hospital, Fulham Road, London SW3 6HP.

Kaposi's sarcoma of lymph node. Node is partially replaced by proliferation of spindle cells forming mesh. Extravasated red cells are present in tissue spaces. ($\times 250$ magnification).