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Follow-Up on Kaposi's Sarcoma and *Pneumocystis* Pneumonia

Twenty-six cases of Kaposi's sarcoma (KS) and 15 cases of *Pneumocystis carinii* pneumonia (PCP) among previously healthy homosexual men were recently reported (1,2). Since July 3, 1981, CDC has received reports of an additional 70 cases of these 2 conditions in persons without known underlying disease. The sex, race, sexual preference, and mortality data known for 108 persons with either or both conditions are summarized in Table 1.

The majority of the reported cases of KS and/or PCP have occurred in white men. Patients ranged in age from 15-52 years; over 85% were men 25-49 years of age. Ninety-four percent (95/101) of the men for whom sexual preference was known were homosexual or bisexual. Forty percent of the reported cases were fatal. Of the 82 cases for which the month of diagnosis is known, 75 (91%) have occurred since January 1980, with 55 (67%) diagnosed from January through July 1981. Although physicians from several states have reported cases of KS and PCP among previously healthy homosexual men, the majority of cases have been reported from New York and California.

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**Editorial Note:** KS is a rare, malignant neoplasm seen predominantly in elderly men in this country. In elderly men the disease is manifested by skin lesions and a chronic clinical course; it is rarely fatal (3). In contrast, the persons currently reported to have KS are young to middle-aged men, and 20% of the cases have been fatal. Although some of the patients have presented with the violaceous skin or mucous membrane lesions

**TABLE 1.** Cases of Kaposi's sarcoma (KS) and *Pneumocystis carinii* pneumonia (PCP) reported to CDC with dates of onset between January 1976 and July 1981

Diagnosis (number of patients)	Sex		Race of men				Sexual preference of men			Fatality (percentage)
	Male	Female	White	Black	Hispanic	Unknown	Homosexual or bisexual	Heterosexual	Unknown	
KS and PCP (N=7)	7	0	5	0	1	1	7	0	0	3/7 (43%)
KS only (N=47)	47	0	41	3	3	0	44	1	2	8/47 (17%)
PCP only (N=54)	53	1	33	9	7	4	44	5	4	33/54 (61%)
Total (N=108)	107	1	79	12	11	5	88	6	6	43/108 (40%)

typical of KS, many such lesions have been initially overlooked. Other patients have been diagnosed by lymph-node biopsy after a prodrome consisting of fever, weight loss, and lymphadenopathy. Seven (13%) of fifty-four KS patients also had PCP. In many cases the histopathologic diagnosis from skin, lymph node, or visceral-lesion tissue has been difficult even in specialized hands.

The occurrence of *Pneumocystis carinii* pneumonia in patients who are not immunosuppressed due to known underlying disease or therapy is also highly unusual (4). Although 7 (11%) of the 61 patients with PCP also had KS, in many instances pneumonia preceded the tumor. Although most of the patients with PCP reported recent respiratory symptoms, some gave a history of weeks to months of systemic symptoms including weight loss and general malaise, similar to the prodrome described by patients who developed lymphadenopathic KS. Several of the patients with PCP had other serious infections, including gastrointestinal candidiasis, cryptococcal meningitis, and disseminated infections with *Mycobacteriaceae* and herpes simplex. Many of the PCP and KS patients have had positive cultures or serologic evidence of infection with cytomegalovirus.

The apparent clustering of both *Pneumocystis carinii* pneumonia and KS among homosexual men suggests a common underlying factor. Both diseases have been associated with host immunosuppression (4-6), and studies in progress are showing immunosuppression in some of these cases. The extent or cause of immune suppression is not known. Physicians should be aware of the possible occurrence of these diseases and other opportunistic infections, particularly among men with symptoms suggestive of these disorders or their prodromes, since therapy is specific and verification of the diagnosis requires biopsy.

Several state and local health departments and CDC are conducting active surveillance for KS, PCP, and opportunistic infections in persons without known predisposing underlying disease. A national case-control study will be implemented shortly.

**References**

1. CDC. *Pneumocystis pneumonia* — Los Angeles. *MMWR* 1981;30:250-2.
2. CDC. Kaposi's sarcoma and *Pneumocystis pneumonia* among homosexual men — New York City and California. *MMWR* 1981;30:305-8.
3. Safai B, Good RA. Kaposi's sarcoma: a review and recent developments. *CA* 1981;31:1-12.
4. Walzer PD, Peri DP, Krogstad DJ, Rawson PG, Schultz MG. *Pneumocystis carinii* pneumonia in the United States. Epidemiologic, diagnostic, and clinical features. *Ann Intern Med* 1974;80:83-89.
5. Penn I. Kaposi's sarcoma in organ transplant recipients: report of 20 cases. *Transplantation* 1979; 27:8-11.
6. Genge RW, Jones EW. Kaposi's sarcoma and immunosuppressive therapy: an appraisal. *Clin Exp Dermatol* 1978;3:135-46.