

**Memorandum**

Date June 11, 1981

From Deputy Director
Parasitic Diseases Division
Center for Infectious Diseases

Subject Kaposi's Sarcoma in Male Homosexuals

To THE RECORD

On June 5, 1981, Dr. Friedman-Kein, Professor of Dermatology, New York University, New York City, called Philip S. Brachman to discuss 30 cases of Kaposi's Sarcoma diagnosed in New York City over the past 2 years. Dr. Friedman-Kein was also aware of an additional 5 cases (3 in San Francisco, 1 in Florida, and 1 in Toronto) which had occurred over the same period of time.

On June 7, 1981, Dr. Friedman-Kein's call was returned by Dr. Kaiser. Drs. Juranek and Healy also participated in this phone call. It was learned that all 30 patients were active male homosexuals ranging in age from 25 to 50 years. All had a history of infection with E. histolytica and had been treated with 1 or more courses of metronidazole. Drug use (amyl nitrate, marijuana, various uppers and downers, and muscle relaxants) was also prevalent in this population. All patients had evidence of immunosuppression as measured by poor response to various skin test antigens (PPD, measles, mumps, and DNCP). A few patients had documented decreased lymphocyte function as measured by lymphocyte transformation response. At least some of the patients also had documented evidence of concurrent CMV and/or Pneumocystis carinii pneumonia. Metastatic dissemination, which is considered uncommon in most patients with Kaposi's Sarcoma, was a frequent finding in these 30 cases.

Several patients have died. Autopsy data were available on at least 7 persons; 1 was known to have died of Pneumocystis pneumonia, but the cause of death listed on the death certificates for the other 6 persons was not known by Dr. Friedman-Kein.

Other persons mentioned by Dr. Friedman-Kein who have been collaborating in the NYC investigation are:

Dr. Ladenstein; Dr. Hynes, a hematologist; Dr. Elena Cline, virologist; Dr. Marmor, epidemiologist at New York University; and Dr. Muggia.

A meeting involving representatives of CID, CPS, CEH, and Epi Program was held on June 10, 1981, to further discuss the situation. In attendance were Drs. Dowdle, Kaiser, Juranek, Healy, Kagan, Carden, Bennett, Gordon, Herrmann, Stewart, Ing, Larsen, Curran, Jaffe, Guinan, Brachman, Bernard, and Mr. Bradford.

Dr. Curran, Chief, Operational Research Branch, VD Control, CPS, related recent conversations that he had had with Dr. Larry Drew, Chief of Virology, Mt. Zion Hospital, San Francisco, and Dr. Preikskitas, Infectious Disease Fellow, Stanford, and Dr. Dan William, private practitioner in New York City. These conversations revealed the occurrence of 4 cases of Kaposi's Sarcoma in homosexual males in California (2 in San Francisco and 2 in Palo Alto) and 3 cases in homosexual males in New York City. CMV was isolated from both patients in San Francisco; 1 also had biopsy confirmed Pneumocystis carinii pneumonia. Both patients at Palo Alto were in their 40s. One had disseminated Kaposi's Sarcoma of less than 2 years' duration involving the gastrointestinal tract. CMV had been isolated from this patient, but it was not clear when this isolation was made with respect to development of Kaposi's Sarcoma. The patient developed several recurrent episodes of Campylobacter bacteremia and died. The second patient in Palo Alto is currently being treated for renewed tumor activity. The patient is also experiencing recurrent oral and genital severe herpes simplex infection. None of the 4 California cases knew one another.

The 3 cases of Kaposi's Sarcoma reported by Dr. William occurred in male homosexuals over a one and one-half year period. Some or all of the NYC cases overlap with those reported by Dr. Friedman-Kein. The first patient died from the tumor, and there was little clinical information that was immediately available on this patient. The second patient had evidence of immunodeficiency, Pneumocystis carinii pneumonia, CMV, multiple episodes of amebiasis, various bacterial pneumonias, and died recently of Cryptococcus meningitis. Patient three in New York City is presently undergoing treatment for Kaposi's Sarcoma. The 3 New York patients apparently do not know one another.

According to Dr. Ing, Cancer Registry data for 1969 through 1971 revealed that approximately 38 cases of Kaposi's Sarcoma were reported for the 3-year period in the United States. Since 13 of these cases were reported from San Francisco and 9 from Detroit, this was thought to be a gross underestimate of Kaposi's.

Dr. Guinan, VD Control Division, learned from Dr. Fred Siegel, Mt. Sinai Hospital, today of 4 recent cases of severe genital herpes infections among homosexual men in New York City. All men showed laboratory evidence of immunosuppression. Two of these men have died and 2 remain hospitalized, receiving systemic antiviral therapy.

Dr. Gordon expressed the opinion that immunosuppression appeared to be the common denominator in patients with Pneumocystis carinii pneumonia, CMV, and Kaposi's Sarcoma and that it seemed likely that one or more co-factors would explain the occurrence of these diseases in homosexuals better than a single specific infectious organism such as CMV. Evidence for this hypothesis stems from the fact that CMV infection is common in many other immunosuppressed patients without the occurrence of Kaposi's Sarcoma.

Dr. Jaffe put forth the hypothesis that a new, more virulent strain of CMV might explain the recent clustering of Kaposi's Sarcoma and opportunistic infections such as Pneumocystis and candidiasis in homosexuals, since CMV is thought to be immunosuppressive by itself. High mobility in this population would lead to rapid dissemination..

Other hypotheses discussed included the effects of 1)drugs such as metronidazole, stimulant drugs, or drug metabolites on immunity, 2)unusually high doses of virus such as CMV, and 3)unusual routes of inoculation of infectious agents, e.g., direct inoculation of virus into the blood through microfissures in the rectum.

Dr. Kaiser closed the meeting by indicating that Dr. Juranek, Parasitic Diseases Division, CID, and Dr. Curran, VD Division, CPS, would meet with Dr. Friedman-Kien in New York City on Friday, June 12, 1981, to obtain more detailed information about some of the cases and lay the ground work for a more detailed epidemiologic investigation. A follow up meeting will be held the week of June 15 to review their findings and to develop future plans.

Dennis

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