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Lymphoproliferative Disorders in Patients at Risk for AIDS: Reactive and Neoplastic

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Persistent, generalized lymphadenopathy (PGL) has been defined as the occurrence of lymphadenopathy involving two or more extra-inguinal sites, of at least three months' duration, in the absence of any known intercurrent illness known to cause lymphadenopathy. Morphologically, the nodes exhibit a characteristic exuberant follicular hyperplasia, with disorganization and disruption of the reactive follicles. We began a study of the natural history of PGL in homosexual men from Los Angeles in 1983; 51 patients have now been studied, and form the basis for this report. All men were homosexual or bisexual, and all have history of receptive anal intercourse, promiscuous and anonymous sexual contact, with a median of 200 life-time male sexual partners. All patients had history of illicit "recreational" drug abuse, including marijuana, cocaine, amyl nitrite, and amphetamine.

The initial symptoms of illness included fever (47%), night sweats (35%), headache with photophobia (18%), and extreme fatigue and malaise (53%). Most patients first noted the onset of lymphadenopathy after the onset of fever and malaise. In time, many patients experienced a resolution of fever, headache, sweats

and malaise, while no patient has had resolution of lymphadenopathy.

The mean T4:T8 ratio of our PGL patients was 0.57 (range 0.2-1.2; normal of 0.9-2.9). The majority of patients were also found to have polyclonal hypergammaglobulinemia.

Presence of antibody to HTLV-III was found in 96% of the PGL patients, while live virus could be cultured from peripheral blood lymphocytes in 28/44 (64%). Of 31 well, asymptomatic homosexual male control patients, 17 (55%) had antibody to HTLV-III, and 3/9 had live virus cultured from blood. Of 40 heterosexual asymptomatic controls, none had antibody to HTLV-III.

In time, one of our PGL patients evolved to develop a high-grade, B-cell lymphoma, a finding which prompted our study of malignant lymphoma occurring in homosexual men, as part of the current epidemic of AIDS. We have studied 27 such patients, diagnosed since 1982. High-grade, B-cell lymphomas were found in 22 (B-cell immunoblastic sarcoma, or small non-cleaved lymphoma), while low-grade lymphomas were found in five. Antibody to HTLV-III was present in 13/15 (87%) with high-grade disease, and in 2/5 (40%) with low-grade types ($p=.07$). In contrast, only one of 11 (9%) "control" heterosexual patients, with identical, high-grade lymphomas, diagnosed in our Institution since 1980 had antibody to HTLV-III ($p<.001$). Of the homosexual lymphoma patients, 85% presented with disease in extranodal sites, including central nervous system, and rectum. During the course of disease, 44% of the group experienced disease within the central nervous system. A reversal of T4:T8 lymphocytes in the blood was present in 81%. Despite multi-agent chemotherapy, the median survival of these patients was eight months, with death due to underlying lymphoma in the majority. The AIDS-related lymphomas are extra-nodal, high-grade, B-cell tumors, associated with HTLV-III.