T-Lymphocyte Subpopulations in Hemophiliac Patients

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FUNAKOSHI, N., KANO, T., UCHINO, H. and YASUNAGA, K. *T-Lymphocyte Subpopulations in Hemophiliac Patients.* Tohoku J. exp. Med., 1985, **146** (3), 377-378 — Laboratory data are presented on 15 patients with hemophilia A. Mean OKT4/OKT8 ratio in hemophiliac patients was significantly lower than in the controls. Although no patients with acquired immunodeficiency syndrome (AIDS) have been found in Japan, hemophilic patients are supposed to be at increased risk of AIDS by our studies. ——— hemophilia; AIDS; factor VIII concentrates; T-lymphocyte subpopulations

Although quite a many researchers have been interested in AIDS, no patients have been diagnosed as AIDS definitely in Japan.

Recently investigators suggested that viruses (lymphadenopathy associated virus, LAV; human T-cell leukemia virus-III, HTLV-III) cause AIDS (Barré-Sinoussi et al. 1983; Gallo et al. 1984), so hemophilic patients are considered to be at increased risk of AIDS owing to the administration of factor concentrates (Davis et al. 1983; deShazo et al. 1983; Lederman et al. 1983; Menitove et al. 1983). We evaluated the T-lymphocyte subpopulations in 15 patients with hemophilia A treated with factor VIII concentrates imported from U.S.A. using commercially available monoclonal antibodies (Ortho Diagnostic Systems, Raritan, N.J., USA). Table 1 shows the results of testing the cell populations by automated flow-cytometry system.

All the patients had normal absolute lymphocyte counts. But the proportion of

TABLE 1. *T-lymphocyte subpopulations in hemophiliac patients and controls*

Subject	Number	OKT4 (%)	OKT8 (%)	OKT4/OKT8
Patients	15	28.9±7.6*	35.2±9.1	0.89±0.35*
Controls	10	35.6±7.8	31.4±7.0	1.23±0.58

Values are given in terms of mean±s.d.

* Significantly different from controls ($p<0.05$).

OKT4-positive cells and mean OKT4/OKT8 ratio in hemophiliac patients were significantly lower than those of the controls. Nevertheless, none of them have developed AIDS-like symptoms. It is fortunate that AIDS has not yet appeared in Japan, but hemophiliac patients might be at increased risk of AIDS because of the prolonged exposure to factor concentrates.

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