AIDS VIRUS ISOLATED FROM CORNEA

Scientists at the National Institutes of Health have isolated the virus believed to cause acquired immune deficiency syndrome (AIDS) from the corneal transplant tissue of a potential donor who was infected with the HTLV-III virus, but prior to his death did not have clinical symptoms of the disease.

In the February issue of the American Journal of Ophthalmology, S. Zaki Salahuddin of the National Cancer Institute (NCI) and Dr. Alan G. Palestine of the National Eye Institute (NEI) reported that HTLV-III was isolated from two corneal transplant specimens retrieved three hours after the donor died in a car accident.

The tissue was obtained by sterile technique from both eyes of a 32-year-old man who had no history of homosexuality or intravenous drug abuse, but had been imprisoned twice, most recently, 7 months prior to his death, the scientists said. The victim's body showed no outward signs that it was infected with the HTLV-III virus, but the corneal transplant tissue and the victim's blood were screened with the ELISA assay, used widely by blood banks to test blood donors for HTLV infection. The corneas were not transplanted.

Although no cases of AIDS have been reported in corneal transplant recipients, presence of the virus in transplant tissue would increase the recipient's risk, say the scientists. Because of such concerns, most eye banks in the U.S. routinely screen blood from donors for human T-cell lymphotrophic virus type III (HTLV-III), the causative agent
in AIDS. HTLV-III has been isolated from body fluids such as blood, saliva, semen, and tears. To date, no cases of transmission of the virus by causal contact of tears or saliva have been reported.

Last September, NCI and NEI scientists reported isolating the virus from the teardrops of a woman suffering from the disease. Three other AIDS patients were found to have lower amounts of the virus in their tears, but they too had healthy-appearing eyes, S. Zaki Salahuddin and Dr. Leslie S. Fujikawa reported (see Sept. 7, 1985 issue of The Lancet).

The Centers for Disease Control (CDC) published guidelines for preventing transmission of the HTLV-III virus from tears, and recommended that transplant tissue be routinely screened for the HTLV-III virus in the May 24, 1985 issue of Morbidity and Mortality Weekly Report (MMWR).

The Eye Bank Association of America (EBAA) says its members routinely screen for exposure to the HTLV-III virus. For further information on this, contact Dave Kinsman, EBAA, (202) 628-4280. The EBAA’s membership comprises 90 percent of the Nation’s eye banks, including 48 Lions eye centers.

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