alcohol and hydrogen peroxide (H202). There is currently available a contact lens cleaning solution which contains 20% mg./ml. isopropyl alcohol.[10] Several (H202) systems are on the Canadian market for use with gas permeable rigid and hydrophilic lenses. H202 is an effective cell killing agent due to its strong oxidative potential. Free radical species (eg. hydroxyl ion) are generated under certain conditions and it is the hydroxyl radical that destroys the target cell. The hydroxyl radical will react with any group of phospholipids, proteins, or carbohydrates which will then undergo oxidative degradation. Three percent H202 has been shown to be effective against a wide variety of micro-organisms, including the herpes simplex virus. (HSV-1)

It appears that using a combination of an isopropyl alcohol cleaner and H202 (3%) for 2 hours would result in the destruction of the HTLV III virus. However, this is still to be proven. An ethylene oxide sterilizing system should also be effective but the residue has a vesicant action and would be difficult to move from contact lenses.

In conclusion, it appears that there is a remote possibility of infection with HTLV III via the tears of affected individuals in the use of tonometers and contact lenses.

Practitioners should be aware of the risks involved and take appropriate measures to eliminate them as far as possible. It is the responsibility of the doctor to ensure effective disinfection of the devices used in practice. The patient should question, and be assured, to his/her satisfaction.

Apparently it is the practice of some dispensers of contact lenses to accept the return of such lenses if the patient is not satisfied. Returned lenses may later be applied to the eyes of other patients. Patients should be warned of the attendant dangers inherent in such practices, especially if effective disinfection procedures are not in use.

Although the risk of AIDS infection through the use of contact lenses has not been demonstrated, it would benefit us all to keep it that way by taking the appropriate precautions.

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Mitogen: Substance or agent capable of inducing mitodic activity in an otherwise dormant cell.

Antigen: Substance or agent capable of inducing antibody formation and of reacting specifically with antibodies produced.

Recommendations for Preventing Possible Transmission of AIDS from Tears

Dr. A. J. Clayton, MB, ChB, DPH, MFCM, FRCP(C), Director General of Health and Welfare Canada Laboratory Center for Disease Control/ Ottawa, has transmitted to the Canadian Association of Optometrists' National Office on August 30th, 1985 at 2:15 p.m., the following enclosed recommendations telexed earlier by the U.S. Center for Disease Control (CDC) in Atlanta.

Dr. Bruce Rosner, President of the Canadian Association of Optometrists, requested immediate circulation of this information to every optometrist in Canada because of its importance to optometrists and their patients.

Recommendations for Preventing Possible Transmission of Human T-Lymphotropic Virus Type III/ Lymphadenopathy-Associated Virus from Tears.

Human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV), the etiologic agent of acquired immunodeficiency syndrome (AIDS), has been found in various body fluids, including blood, semen and saliva. Recently, scientists at the National Institutes of Health isolated the virus from the tears of an AIDS patient (1). The patient, a 33-year-old woman with a history of Pneumocystis carinii pneumonia and disseminated mycobacterium avium-intracellulare infection, had no ocular complaints, and her eye examination was normal. Of the tear samples obtained from six other patients with AIDS or related conditions, three showed equivocal culture results, and three were culture-negative.

The following precautions are judged suitable to prevent spread of HTLV-III/LAV and other microbial pathogens that might be present in tears. They do not apply to the procedures used by individuals in

caring for their own lenses, since the concern is the possible virus transmission between individuals.

1. Health-care professionals performing eye examinations or other procedures involving contact with tears should wash their hands immediately after a procedure and between patients. Handwashing alone should be sufficient, but when practical and convenient, disposable gloves may be worn. The use of gloves is advisable when there are cuts, scratches, or dermatologic lesions on the hands. Use of other protective measures, such as masks, goggles, or gowns, is not indicated.
2. Instruments that come into direct contact with external surfaces of the eye should be wiped clean and then disinfected by: (a) a 5- to 10-minute exposure to a fresh solution of 3% hydrogen peroxide; or (b) a fresh solution containing 5,000 parts per million (mg/L) free available chlorine — a 1/10 dilution of common household bleach (sodium hypochlorite); or (c) 70% ethanol; or (d) 70% isopropanol. The device should be thoroughly rinsed in tap water and dried before reuse.
3. Contact lenses used in trial fittings should be disinfected between each fitting by one of the following regimens:
   a) Disinfection of trial hard lenses with a commercially available hydrogen peroxide contact lens disinfecting system currently approved for soft contact lenses. (Other hydrogen peroxide preparations may contain preservatives that could discolor the lenses.) Alternatively, most trial hard lenses can be treated with the standard heat disinfection regimen used for soft lenses (78-80 C (172-176F) for 10 minutes). Practitioners should check with hard lens suppliers to ascertain which lenses can be safely heat-treated.
   b) Rigid gas permeable (RGP) trial fitting lenses can be disinfected using the above hydrogen peroxide disinfection system. RGP lenses may warp if they are heat-disinfected.
   c) Soft trial fitting lenses can be disinfected using the same hydrogen peroxide system. Some soft lenses have also been approved for heat disinfection. Other than hydrogen peroxide, the chemical disinfectants used in standard contact lens solutions have not yet been tested for their activity against HTLV-III/LAV. Until other disinfectants are shown to be suitable for disinfecting HTLV-III/LAV, contact lenses used in the eyes of patients suspected or known to be infected with HTLV-III/LAV are most safely handled by hydrogen peroxide disinfection.

The above recommendations are based on data from studies conducted at the National Institutes of Health and CDC on disinfection/inactivation of HTLV-III/LAV virus (2-4). Additional information regarding general hospital and laboratory precautions have been previously published (5-9). Reported by the U.S. Food and Drug Administration; National Institutes of Health; Centers for Disease Control.

Editorial Note: All secretions and excretions of an infected person may contain lymphocytes, host cells for HTLV-III/LAV; therefore, thorough study of these fluids might be expected to sometimes yield this virus. Despite positive cultures from a variety of body fluids of infected persons, however, spread from infected persons to household contacts who have no other identifiable risks for infection has not been documented. Furthermore, there is no evidence to date that HTLV-III/LAV has been transmitted through contact with the tears of infected individuals or through medical instruments used to examine AIDS patients.

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