Tenth annual AIDS conference

The 10th International Conference on AIDS presented no cures or vaccines for the epidemic, but speakers outlined some therapies that might prolong survival, and one treatment that reduces maternal-fetal HIV transmission.

The "AIDS Clinical Trials Group (ACTG) 076" showed a 67.5 percent reduced risk of maternal-fetal HIV transmission with Zidovudine (AZT) therapy. AZT was given to pregnant, HIV-positive women at regular intervals beginning between 14 and 34 weeks gestation until birth. Newborns received oral doses for six weeks.

Researchers presented studies on combination therapies which might slow, or block, the spread of AIDS. A combination of AZT and didanosine appeared to decrease viral replication in advanced HIV patients, researchers reported. Gene therapy, designed to boost host immunity or suppress viral replication, was discussed. Researchers also plan to further study protease inhibitors which seem to block enzymes that allow HIV to spread between cells.

A 10-year study of long-term AIDS survivors showed that a combination of an individual's genetic background and their response to HIV kept viral levels low, but researchers have not yet been able to correlate statistics between HIV-infected individuals whose disease progresses and those in whom it does not. The role of immune proteins, called cytokines, in the long-term progression of HIV also was examined.

Worldwide figures for the epidemic showed an explosion in HIV cases in Asia. Some 2.5 million AIDS cases have been reported in 1994, more than a year ago, according to World Health Organization figures. Drawing attention to the AIDS crisis in Asia was a major reason for holding the conference Aug. 7-12 in Yokohama, Japan, conference organizers said.

AIDS publications and studies

Single copies of the CDC publication, Recommendations of the U.S. Public Health Service Task Force on the Use of Zidovudine to Reduce Perinatal Transmission of Human Immunodeficiency Virus, are available free by contacting: U.S. Centers for Disease Control and Prevention National AIDS Clearinghouse, P.O. Box 6003, Rockville, MD 20849-6003; (800) 458-5231.

Data from two AIDS Clinical Trials Group (ACTG) studies are available from the National Technical Information Service (NTIS), affiliated with the National Institute of Allergy and Infectious Diseases.

The ACTG study 019, Safety and Efficacy of Zidovudine for Asymptomatic HIV-infected Individuals, order number PB 94-501871; and ACTG study 116B/117, A Phase II Efficacy Study Comparing 2,3'-Dideoxynosine and Zidovudine Therapy of Patients with HIV Infection Who Have Been on Long-Term Zidovudine Treatment, order number PB94-504099GEI, are available on disk or hard copy.

For prices and ordering information, contact: NTIS, 5285 Port Royal Road, Springfield, VA 22161; (703) 487-4650.

Downs syndrome prevalence

The rate of Downs syndrome births in the U.S. is highest among Hispanic infants and lowest among blacks, according to a study in the Aug. 26 Morbidity and Mortality Weekly Report (MMWR).

The U.S. Centers for Disease Control and Prevention (CDC) examined 7.8 million live births in 17 states from 1983 to 1990. Downs syndrome was reported in 9.2 out of every 10,000 births among whites, 11.8 per 10,000 births among Hispanics and 7.3 per 10,000 births among blacks.

Births statistics were divided by five-year maternal age groups. Downs syndrome birth rates were higher for Hispanics in all age groups except among mothers ages 25 to 29 years in 1990, in which white and Hispanic Downs syndrome birth rates were similar.

Immune gamma globulin and low birth weight

Contrary to past studies, immune gamma globulin (IGG) does not reduce risks for hospital-acquired infections among very-low-birth-weight infants, and might increase their risk for other conditions, according to a recent National Institute of Child Health and Human Development (NICHD) report.

Some 2,416 infants, weighing between 501 and 1,500 grams, were enrolled in the NICHD Neonatal Research Network study. Infants who received IGG showed no reduction in hospital-acquired infections. Additionally, 12.5 percent of those treated with IGG developed necrotizing enterocolitis, a gangrene-like infection of the intestinal tract. Of the placebo group, 9.5 percent developed the condition.

Mississippi immunization registry

Mississippi is the first state to enact legislation requiring physicians to report vaccinations to a statewide registry, the July 18 Immunization Action News reported.

The "Mississippi Child Immunization Act of 1994," which became law in July, requires the state's health department to establish a statewide childhood immunization registry to which health care providers must report administered childhood immunizations.

Parents and physicians will be able to check a child's immunization status through a toll-free telephone number. The registry also will serve as a parental vaccination reminder to ensure timely immunizations, state officials reported.

Intensive adolescent diabetes treatment

Intensive insulin treatment delays the onset, and slows the progression, of retinopathy and kidney abnormalities in diabetic adolescents, ages 13 to 17 years, according to a study reported in the August Journal of Pediatrics.

Researchers studied 125 adolescents with no retinopathy, and 70 with mild retinopathy. They gave the subjects either conventional insulin treatment (one to two daily injections) or intensive treatment with an insulin pump and at least three daily insulin injections. Subjects were followed for approximately seven years.

Among subjects with no retinopathy, the risk of acquiring the vision disorder was reduced 53 percent with intensive insulin treatments. Among those with mild retinopathy, the risk of its progression was reduced 70 percent with intensive therapy.

A major adverse effect was a three-fold increase in adolescents' incidence of severe hypoglycemia, but re-