HERPES SIMPLEX VIRUS (HSV) INFECTION IN NEONATES, TREATED WITH ADENINE ARABINOSIDE (ARA-A). Lawrence T. Ch'ien, Richard J. Whitley, Andre J. Nahmias, Robert A. Buchanan, Charles A. Alford. Dept. of Ped., Univ. of Ala. in Birmingham Sch. of Med., Birmingham, Ala., Emory Univ., Atlanta, Ga., and Parke, Davis and Co., Ann Arbor, Mich.

Among 13 neonates with HSV (8 type 2, 4 type1) infection, 8 had disseminated disease and in 4 the infection was localized to the skin and eyes. Ara-A, 10-20 mg/kg/day, was given by a continuous 12 hour intravenous drip for 10-15 days. In all, ara-A was started from 4-6 days after the first appearance of skin vesicles (s.v.) which represented the hallmark of diagnosis. Eight infants (4 disseminated and 4 localized) with s.v. as the earliest sign of infection received ara-A early within 3 days of the onset of neurologic signs (n.s.). All survived with no neurologic deficit at 6 months to 1 year of age. The other 5 infants in group I having nonspecific n.s. with delayed appearance of absence of s.v. were treated late with ara-A, (avg. 14 days after the onset of n.s.). Four died and 1 was left with severe neurologic deficits. They were initially misdiagnosed as neonatal sepsis and treated with antibiotics for 10.5 days while 4 others in the same group with good outcome received antibiotics for only 1.5 days prior to diagnosis. There was no apparent toxicity of ara-A to the bone marrow, liver or kidney. These data suggest that ara-A may be efficacious in treatment of neonatal HSV infection if given early and that early recognition of the infection even in the absence of s.v. appears essential.

PHISOHEX VERSUS TOPICAL GENTAMICIN IN CLINICAL CONTROL OF NEONATAL STAPHYLOCOCCUS AUREUS COLONIZATION. William F. Coyer (Intr. by James W. Bass). Department of Pediatrics, Tripler Army Medical Center, Honolulu, Hawaii

Neonatal staphylococcal colonization has become a clinical problem in many nurseries recently. Environmental control measures, cohort nursing, routine hexachlorophene bathing, and competitive colonization are among the measures currently proposed for controlling colonization. Because of its potent antistaphylococcal properties and realizing the potential risk for the evolution of microbial resistance to gentamicin, we randomly compared: (1) routine total body 3% hexachlorophene bathing with (2) topical 0.1% gentamicin ointment application to the umbilicus following Ivory soap bathing. All infants were randomly assigned to Group (1) or (2) and treated within the first six hours of life and daily until discharged. All infants were rinsed thoroughly following bathing. 1117 infants completed the study and received anterior nares cultures at the time of hospital discharge. 122/571 infants (21%) in Group (1) were colonized with Staphylococcus aureus, and 154/546 infants (28%) in Group (2) were colonized ($p = < 0.01$). Most staphylococci isolated were penicillin resistant (94%) and of the phage Group II. Based on these data, routine hexachlorophene bathing is superior to routine gentamicin ointment application to the umbilicus following Ivory soap bathing, in controlling Group II neonatal Staphylococcus aureus colonization.

INSECTICIDE AND VIRAL INTERACTION AS A CAUSE OF FATTY VISCERAL CHANGES AND ENCEPHALOPATHY. John F.S. Crocker, Kenneth R. Rozee, Rudolph L. Ozere, Sharon C. Digout, Otto Hutzinger. Dalhousie University, Departments of Pediatrics and Microbiology, and National Research Council, Halifax, Nova Scotia, Canada. (Intr. by R.B. Goldbloom)

The possibility of an ecological interaction by chemical "priming" of young animals for viral infectivity stimulated this investigation.

1650 one day old mice were given topically applied chemical dissolved in corn oil for eleven days: (a) DDT, (b) organophosphate (commercial Fenitrothion), (c) organophosphate plus DDT, (d) corn oil alone. Twenty-four hours after discontinuance of all chemicals, 0.05 ml. (sublethal dose) of E.M.C. virus was injected subcutaneously in known titers.

Mortality rates in a 12 day period following injection were (a) 0-10% in DDT groups, (b) 3-8% in organophosphate groups, (c) 72-100% in organophosphate plus DDT groups, (d) 0-5% in corn oil groups.

Pathologically, fatty degeneration was noted in the insecticide/viral groups. The encephalopathy showed no specific CNS pathology but death followed a sequence of paralysis and convulsions. Similar susceptibility with PCB's plus virus was reported in young ducks by Friend and Trainer (Science, 170:1314, 1970).

The effect of currently used combinations of insecticides on human viral susceptibility requires further attention.

GONOCOCCAL INFECTIONS OF CHILDREN IN METROPOLITAN DETROIT. Adnan S. Dajani and Gladys Caldroney. Children's Hosp. of Michigan, Wayne State Univ. Sch. Med., Detroit.

Retrospective analysis of our records over the past 7 years revealed the isolation of *N. gonorrhoeae* on 224 occasions from 222 children. All subjects were inner city dwellers, and all but two were black. Little variation in monthly prevelance was noted over the years, however, a sharp increase in the annual prevelance occurred in 1970 with a gradual decline subsequently. Ophthalmia (50 cases) accounted for 22% of all infections, and occurred mainly in newborns (33 cases). Gonococcal ophthalmia was more common in females than in males, and while the affliction occurred in older girls, no males over the age of 3 years had ophthalmia. Urethritis was noted in 46 boys (21%), 81% of whom were older than 6 years of age and 54% were older than 10 years. Vaginitis (124 cases) accounted for 55% of the infections. In contrast to urethritis in boys, 65% of girls with vaginitis were under 6 years of age and only 7% were older than 10 years. *N. gonorrhoeae* was also recovered from 2 blood cultures, one gastric culture, and a knee aspirate. A history of sexual contact was elicited from 6 boys and from 18 girls. Gonococcal infections were documented in family members of 13 index cases (4 parents, 9 siblings). Of 83 cases with adequate follow-up, 7 failed to respond to appropriate therapy.

These data suggest a high incidence of gonorrhea in the Detroit area and warrent a prospective epidemiologic and clinical investigation of the disease.

CYTOMEGALOVIRUS (CMV) CHRONIC INTERSTITIAL PNEUMONITIS IN INFANCY. Adamadia Deforest, Nancy N. Huang, Lourdes R. Laraya-Cuasay, Dale S. Huff, and Harold W. Lischner. Temple Univ. Sch. Med. and St. Christopher's Hosp. Children, Philadelphia, Pa.

Although pulmonary involvement in disseminated CMV infection is known, CMV is not a generally recognized cause of interstitial pneumonitis in the absence of infection in other organ systems. Of 16 infants presenting with interstitial pneumonitis during the first 6 months of life, 7 were found to have CMV infection. Other viruses identified were influenza in 2, adenovirus type 5 in one, and parainfluenza type 1 in one, the latter concurrently with CMV infection. None of 5 healthy children with onset of interstitial pneumonitis at 6-42 months of age had CMV infection although influenza was isolated from 2 and adenovirus type 2 from a third child. CMV infection was documented by complement fixing and IgM fluorescent antibodies in all 7 infants, by virus isolation from urine in one, and by the presence of typical CMV-inclusion-bearing cells in lung tissue from the 3 who had biopsy. Lung tissue showed extensive hypertrophy and hyperplasia of type II pneumocytes and mild to severe chronic inflammatory cell infiltrates and interstitial fibrosis. Total serum IgM levels were elevated in 6 infants. The exact time of CMV infection in these 7 infants could not be documented, but was presumed to be after birth, since all were normal through the first weeks of life. Clinical recovery was complete within 6 months in 5 of the 6 followed that long. We conclude that CMV is a major cause of interstitial pneumonitis in young infants.

MYOSITIS ASSOCIATED WITH INFLUENZA B INFECTIONS. Dale E. Dietzman, Jane Schaller, C. George Ray, Marie E. Reed. Univ. of Washington Sch. of Med., Dept. of Peds., and Children's Orthopedic Hosp. & Med. Center, Seattle, Washington.

An epidemic of acute myositis affecting children occurred in Seattle during March-May, 1973, with most pediatricians seeing several cases. The disease was characterized by a prodrome of upper respiratory symptoms, fever, and headache, followed in several days by sudden onset of refusal to walk or abnormal gait with toe-walking. Gastrocnemius-soleus muscles were chiefly affected, being tender, swollen and painful. Muscle symptoms, although dramatic, resolved completely within 3-7 days without special therapy. Transient elevations of serum CPK or SGOT were noted in 16 of 17 patients tested.

Influenza B virus was isolated from throat swabs of 11 of the 17 patients studied. One of the isolates was characterized, and was antigenically "intermediate" between the 1967-71 isolates and B/Hong Kong/5/72. Paired sera from 12 patients were tested for HI antibodies to strain B/Hawaii/3/73 (an "intermediate"); 4 patients had a greater than 4-fold titer rise, and 4 had detectable but lesser titer rises. No titer rises by CF testing were detected for 8 other respiratory agents.

This unusual complication of influenza has been previously reported in Stockholm (1955), Toronto (1969-70) and Boston (1972). The distinctive clinical picture of dramatic but self-limited calf muscle myositis following a flu-like illness makes this a clearly recognizable syndrome which should not be confused with dermatomyositis.