1092 SEPTICEMIA IN THE ABSENCE OF CRP ELEVATION. Alexander C. Hyatt, Asher Barzilai, David S. Hodes and Eugene Ainbender. The Mount Sinai School of Medicine, Dept. of Pediatrics, New York, New York.

At the Children's Center of the Mount Sinai Hospital quantitative measurements of serum C-reactive protein (CRP) are frequently made. We have performed more than 30,000 such tests since 1974. A serum CRP determination is made whenever a blood culture is obtained. This practice made it possible for us to assess the value of quantitative CRP measurement in the prediction of septicemia.

Over a three-year period, 127 positive blood cultures were identified. In 18 episodes of septicemia in 17 patients (ages 2 weeks to 17 years) the initial CRP was $\leq$ 1.5 mg/dl. In 14 of these 18 episodes, it was $\leq$ 1 mg/dl. Three children (4 episodes) were on chemotherapy for malignancy. Three children died the day of the determinations. The remaining children had serious infections with a variety of different agents, including H. influenzae, S. pneumoniae, S. aureus, Ps. aerugenosa, group B streptococcus, salmonella species, K. pneumoniae, E. cloacae and candida species.

Our data illustrate that a normal initial CRP value is not inconsistent with septicemia. Physicians using CRP measurements for diagnostic purposes should be aware of this.

1093 MODERATE SENSITIVITY, HIGH SPECIFICITY, AND LOW POSITIVE PREDICTIVE VALUE OF THE GROUP B STREPTOCOCCAL (GBS) LATEX AGGLUTINATION (LA) ANTIGEN DETECTION TEST. David L. Ingram, Angela R. Occhiuti, and Phyllis F. Herman, Univ. N.C., Chapel Hill, Sch. of Med., Dept. Ped. (Spon. by Albert M. Collier).

The purpose of this study was to evaluate the GBS LA test prospectively over 3.5 years in a hospital laboratory. Between 4/1/80 and 11/30/83, 869 urine samples and 302 cerebrospinal fluid (CSF) samples from 1035 patients evaluated for GBS sepsis and/or meningitis were tested by GBS LA. All patients had a blood culture and 302 also had a CSF culture for suspected meningitis. Seventeen patients had culture positive GBS sepsis or meningitis. Thirty-one patients had a positive GBS LA test for GBS antigen. Of these 31, 12 had GBS sepsis and/or meningitis by culture, 13 had GBS surface or gastrointestinal colonization but sterile blood + CSF cultures, and 6 had no evidence of GBS colonization or infection.

Data Summary: GBS sepsis and/or meningitis

GBS LA Test	+	-
+	12=A	19=B
-	5=C	999=D

The test had a sensitivity=A/A+C=12/17=71%, specificity= D/B+D=999/1018=98%, and a predictive value of A/A+B=12/31=39%

Conclusion: The low positive predictive value for the GBS LA test made an individual positive test difficult to interpret.

1094 METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS AT CHILDREN'S HOSPITALS IN THE UNITED STATES. William R. Jarvis, Clyde Thornsberry, James M. Hughes, John Boyce and Robert W. Haley, (spon. by Roger A. Feldman) Centers for Disease Control, Hospital Infections Program, Atlanta, GA, and University of Mississippi School of Medicine, Department of Medicine, Jackson, Mississippi

Although methicillin-resistant Staphylococcus aureus (MRSA) have emerged as important pathogens in hospitalized adults in the United States, reports of MRSA in pediatric patients have been infrequent. To determine the prevalence of MRSA in this population, we surveyed all acute-care children's hospitals in the U.S. 57/67 (85%) hospitals with microbiology laboratories responded to a mailed questionnaire. Those not testing S. aureus for methicillin susceptibility were excluded. 30/53 (57%) reported MRSA isolates. Bacteriologic methods were similar at all hospitals. MRSA were reported at 20/53 hospitals in 1982 compared to 1/53 in 1973 ($p<0.001$). Large hospitals ($\geq$200 beds) were more likely to have MRSA ($p=0.02$). No association was found between MRSA and the presence of burn or intensive care units, residency training programs, or rotation of residents to other hospitals. The proportion of hospitals with MRSA varied from 5/6 (83%) in the Northeast to 4/11 (36%) in the West. MRSA were reported more frequently from hospitals in large metropolitan areas (8/10 vs 22/43). These data show that MRSA are increasing in their importance as pathogens in the pediatric population.

1095 NOSOCOMIAL INFECTION MORTALITY ON PEDIATRIC SERVICES IN THE UNITED STATES, 1975-1983. William R. Jarvis, Linda C. Gray, David H. Culver, and James M. Hughes, (Spon. by Roger A. Feldman). Centers for Disease Control, Hospital Infections Program, Atlanta, Georgia

National Nosocomial Infections Study (NNIS) hospitals conduct prospective surveillance for nosocomial infections (NI) using uniform definitions. Between January 1975 and November 1983, 8122 NI were reported in 701,565 patients discharged from pediatric services; the NI rate was 1.2 per 100 discharges. Among infected patients, 474 deaths occurred (fatality rate 5.8%). The fatality rate was highest in patients with intra-abdominal (18.4%) and CNS (14%) infections, 1° bacteremia (13%) and pneumonia (9%). However, many of the deaths were not the direct result of the NI.

Infection control personnel determined that 142 (30%) of the 474 deaths were caused by the NI. The proportion of deaths that were caused by the NI was similar at medical school affiliated and non affiliated hospitals (30% vs 25%, $p>0.05$). The proportion of infections in which the NI caused death was highest for CNS (11%) and intraabdominal (9.5%) infections. NI associated with 2° bacteremia caused death approximately 6 times more often then those without 2° bacteremia (5.5% vs 0.93%, $p<0.001$). NI with gram-negative bacilli resistant to gentamicin or tobramycin caused death more often then those with susceptible strains (7.9% vs 1.8%, $p<0.001$). Infection control efforts should be focused on the prevention of those pediatric NI associated with the highest mortality.

1096 ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) IN PEDIATRIC HEMOPHILIACS. Janine M. Jason, Terence L. Chorba, Bruce L. Evatt (Spon. by Roger A. Feldman) Centers for Disease Control, Atlanta, GA

Three of 35 U.S. children (<18 years old) with AIDS reported to the Centers for Disease Control (CDC) as of December 1983 had hemophilia. We summarize these and 2 European pediatric AIDS patients with hemophilia, reported to CDC. All 5 patients were white and male; ages ranged from 9-16 years. Four patients had severe hemophilia A; 1, moderate hemophilia B. Two cases resided in New York; 1, in Pennsylvania; the European cases were Spanish and siblings. Four patients presented with fever and weight loss; all had pulmonary symptoms. All cases had laboratory findings consistent with AIDS and had opportunistic infections (OI) including Pneumocystis carinii pneumonia, systemic cytomegalovirus, and systemic fungal infections. Three patients (60%) have died. None had other known risk factors for AIDS or immunosuppressive therapy. The hemophilia B patient received 2 units of whole blood in 1982 and no other blood products. Factor VIII was the only blood product received by both U.S. hemophilia A patients in the past 5 years. The prevalence of hemophilia in pediatric AIDS patients is much higher than its estimated population prevalence (1 in 10,000), indicating that hemophilia is a risk factor for AIDS. AIDS may occur in those receiving only factor or only whole blood therapy. Pediatricians should consider AIDS in any patient with hemophilia and unexplained weight loss, fever, or OI. To help further clarify the role of blood products in AIDS transmission, they should inquire about all product usage and other AIDS risk factors.

†**1097** CYTOMEGALOVIRUS (CMV) INFECTIONS: INFANT DEVELOPMENT VS. DAY CARE CENTERS. Linda A. Jones, Paula M. Duke, Anne S. Yeager, Stanford University School of Medicine, Department of Pediatrics, Stanford, California

CMV causes congenital infection in 0.5-2% of births and may be the leading cause of congenital deafness in the U.S. Personnel in centers for developmentally delayed infants and toddlers are concerned that admission of children known to have CMV may increase the transmission of CMV to pregnant staff and the risk of subsequent congenital infection. Despite lack of data to warrant this assumption, children are denied services because they shed CMV. We studied CMV shedding in urine and saliva in children 0-3 yrs. in day care (DCC) and infant development centers (IDC) and the CMV immunity of the staff (58 staff in 6 DCC and 72 staff in 10 IDC). 59% of DCC and 42% of IDC staff were seropositive. Among staff, seropositivity did not differ by center type, age, or socioeconomic status (SES). There was no positive correlation between seropositivity and length of employment. Among 100 children in 4 DCC and 62 children in 7 IDC, 21% and 22% respectively had CMV urinary shedding. There were no significant differences by age, center type, ambulatory status, or center SES. Thus, CMV urinary shedding is common in these settings. Since 48% of the staff under 35 are seronegative, rates of shedding among the children are of concern. Seroconversion rates among staff working with young children need to be established and more learned about transmission of CMV. Nevertheless, we found no difference between DCC and IDC; thus, staff in IDC are no more likely to have acquired CMV than DCC staff, and there is no indication for excluding known CMV shedders from IDC.