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EARLY TREATMENT OF BEAR MEAT TRICHINOSIS WITH THIOBENDAZOLE. Fredric A. Hoffer and Leonard B. Weiner (Spon. by Frank A. Oski) Dept. of Peds., SUNY, Upstate Med. Ctr., Syracuse, N.Y.

Twenty-nine pts., including 19 children were exposed to trichinosis by butchering (8), handling (7) or eating (22) infested bear meat. Seven were treated with Thiobendazole within 11 days (Gp.1) and 13 within 21-27 days after exposure (Gp.2); the remainder (Gp.3) either had none (5) or less than 2 days (4) of treatment. Histories, eosinophil counts, serum CPK's, latex agglutination (LA), complement fixation, and Bentonite flocculation titers were obtained at the time of treatment and up to 45 days after exposure. The 3 gps. did not differ significantly in intestinal phase symptoms: abdominal pain, nausea, vomiting, and diarrhea; nor did their CPK values. Gp.2 pts. had more circulatory phase symptoms: fever, periorbital edema; and more invasive symptoms: limb pain; than Gp.1. Absolute eosinophilia $>500/m^3$ was noted in 4 pts. (Gp.2), 3 of whom were first exposed by butchering the bear. One pt. (Gp.2) developed symptoms of all 3 phases; CPK of 667 IU/L, absolute eosinophilia to $2992/m^3$, and significant rise in all 3 serologic tests. Positive LA titers were noted in 14 pts. acutely and 4 pts. during convalescence. Irritability was a prominent symptom in all 6 adults on Thiobendazole preventing 4 from finishing a 5-day course of therapy. Eleven of 18 children had side effects of treatment including hyperactivity, irritability, and one instance of hepatotoxicity. This outbreak emphasizes the importance of exposure by butchering as well as ingestion and suggests that early treatment with Thiobendazole may be advantageous.

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TIME OF DETECTION OF GROUP B STREPTOCOCCAL (GBS) CAPSULAR POLYSACCHARIDE (CPS) IN BODY FLUIDS IN THE COURSE OF EARLY ONSET GBS DISEASE. David L. Ingram, Elizabeth L. Pendergrass, James D. Thullen, and Charles D. Yoder. Univ. N.C., Chapel Hill, Sch. of Med., Dept. Ped. (Spon. by Floyd W. Denny).

CPS can be detected in the body fluids of most newborns with GBS disease. To determine if CPS can be detected early enough (≤12 hours) in the course of GBS disease to assist in chosing therapy, randomly collected sera, urine and/or cerebrospinal fluid (CSF) from 13 neonates were tested for CPS by counterimmunoelectrophoresis. Of 10 with pneumonia and sepsis (2 also with meningitis) CPS was detected in serum, urine and/or CSF in 9 by 36 hours of illness. However, CPS was detected in sera in only 3 of 7 neonates during the first 12 hours of illness. CPS was detectable in urine of 2 of 2 neonates tested in the first 12 hours of illness when only 1 had detectable CPS in serum. CPS was also present in the urine of 3 of 3 other patients with CPS in their sera after 12 hours of onset of illness. Of 5 neonates with meningitis (2 also with pneumonia included above), CPS was detectable in the CSF at onset of illness in 3 of 4 with available CSF and not in the serum samples of 1 without available CSF. These data suggest that serum is not the ideal body fluid to test for the early detection of CPS in neonates with GBS disease, and that urine and CSF when appropriate may be better. It is recommended that several body fluids be tested during the course of the illness if antigen detection is to be used optimally as an aid in selecting therapy.

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SUCCESSFUL TREATMENT OF KAWASAKI DISEASE WITH HIGH-DOSE ASPIRIN. Jerry C. Jacobs. Columbia University College of Physicians and Surgeons; Babies Hospital, Department of Pediatrics, New York

20 children with Mucocutaneous Lymph Node Syndrome (Kawasaki Disease) were seen over an 18 month period; 12 cases occurred during one month suggesting a mini-epidemic. Originally very ill patients were treated with prednisone which controlled the process, including pericarditis with tamponade, within 12 hours. The syndrome was also found to respond well to aspirin. Initially patients do not absorb aspirin satisfactorily, resulting in low serum levels and lack of therapeutic response. Doses as high as 185 mg/kg/day of aspirin may be required to achieve a therapeutic blood level and excellent response. We now initiate therapy with 150 mg/kg/day in 6 divided doses. As the patients improve, aspirin absorption returns to normal and the dose is lowered to around 100 mg/kg/day. These observations have led to reduction in hospitalization from weeks to days, and more recently, with ease of prompt diagnosis, to out-patient management of early cases.

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PREVENTION OF NEONATAL HEPATITIS B WITH HIGH DOSE HEPATITIS B IMMUNE GLOBULIN (HBIG). Ramesh Jhaveri and Harvey Dosik, Depts. of Pediatrics and Medicine, Jewish Hospital and Medical Center of Brooklyn, N.Y.

Infants born to mothers acutely or chronically ill with the Hepatitis B Virus (HBV) are at high risk of becoming chronically infected with HBV. The prevalence of HBV infection is lower among neonates born to asymptomatic carriers of surface antigen (HB_SAg) than among those whose mothers have clinical hepatitis. However clinically apparent hepatitis is more common in the former group of infants. A 32 year old female was determined to be a carrier for HB_SAg at the death of her first child from fulminant Hepatitis B at 3 months of age. Her HB_SAg sub type was 'ay' and her serum was 'e' antigen negative. Her second baby, born November 1976, had an uneventful postnatal course. The baby was treated with 5 ml. of HBIG titer 1:500,000 (Cutter Laboratories) on day one and every six weeks for six months. High dose multi injection therapy was given because of failure of single low dose therapy to prevent chronic antigenemia in two previous patients.

Liver function tests, HB_SAg and antibody to HB_SAg have been followed at 3-6 weeks intervals. At eight months of age, growth and development and liver function tests are normal and HB_SAg has remained negative. This case has stimulated us to screen for HB_SAg in a high risk antenatal clinic. A multi-institutional study involving antenatal screening for HB_SAg and treatment with HBIG is needed to determine if the chronic carrier state and neonatal Hepatitis B can be prevented.

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RAPID DIAGNOSIS OF VIRAL INFECTIONS IN A HOSPITAL SETTING: AN AMERICAN EXPERIENCE. Aditya Kaul, Marie Gallagher, Ron Scott, Margaret Scott and Pearay L. Ogra, Dept. of Peds., Sch. of Med., State Univ. of N.Y., and Children's Hospital, Buffalo, N.Y.

Employing direct and indirect fluorescent antibody (FA) staining, and tissue culture infectivity (TCI), the specimens of external secretions, or lesion smears obtained from over 600 patients with acute viral infections were examined for the presence of adenovirus, herpes simplex (HSV), parainfluenza, and respiratory syncytial virus (RSV). A positive correlation of about 95% was observed between the results of FA and TCI for identification of RSV. The isolation of infectious RSV by TCI required 1 to 3 weeks. On the other hand, RSV antigen was detected by FA within 4-6 hours in 92-95% of subjects tested. The RSV was recovered most frequently from subjects with a clinical diagnosis of bronchiolitis (45%), penumonia (32%), asthma (29%) and croup (13%). Direct FA staining of infected tissue cultures inoculated with clinical specimens was employed to identify adenovirus, HSV, and parainfluenza viruses. The isolation of these agents by TCI took as long as 2-3 weeks and their detection by FA could be accomplished within 3-6 days without any additional passages in tissue culture. The rapidity of viral diagnosis resulted in increased awareness of the role of viruses in childhood infection and substantially reduced the indiscriminate use of antimicrobial agents in this hospital since the institution of rapid diagnosis.

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ORAL THERAPY OF BONE & JOINT INFECTIONS: A CONTROLLED PROSPECTIVE STUDY. Emanuel Kolyvas, Gerald Ahronheim, and Melvin I. Marks. McGill Univ., Dept. of Pediatrics; Montreal Children's Hospital. Montréal, Québec, Canada.

To study the efficacy of oral antibiotherapy (Rx) of skeletal infections, children with etiologically defined osteomyelitis (Os) or septic arthritis (A) are alternately assigned to study or control groups. All begin on IV Rx; study patients (pts) change to oral (PO) Rx within 72 hrs; controls continue on IV Rx for 4 wks before changing to PO. Both groups receive 6 wks total Rx. PO doses are adjusted to achieve a peak serum bactericidal activity (pSBA) $\geq$1:8 against the pt's own pathogen.

In the first 6 mos of the study, pathogens have included Staph. aureus (8), Strep spp. (3), and H.influenzae (1). Rx: 5 pts with cephradine (CE), 5 penicillin (P), 1 cloxacillin (CL), and 1 IV ampicillin/PO amoxicillin (AM). 2/12 pts required probenecid to achieve pSBA $\geq$1:8 on PO Rx. Median reciprocal pSBA obtained for IV/PO Rx: for staph, 16/16 with CE, 1024/256 with CL, 2048/1024 with P; for strep, 8192/512 with P; for H.flu, 256/16 with AM.

Study and control groups have shown no difference in clinical course. There have been no treatment failures or relapses within 1-6 mos followup. We have noted that cultures from the infected site yielded the pathogen more often (11/11) than blood cultures (2/12), and that in Os biweekly ^{67}Ga citrate scans often remained abnormal after clinical resolution and completion of Rx.

Results to date suggest that Os and A may be reliably treated with PO Rx if pSBA can be maintained $\geq$1:8, thus permitting shorter hospitalizations and decreased morbidity from prolonged IV Rx.