Selected Abstracts

Otitis Media in Infancy and Intellectual Ability, School Achievement, Speech, and Language at Age 7 Years

To determine intellectual and linguistic sequelae of middle ear disease, 207 children were randomly selected from a cohort of 498 followed prospectively from birth until age 7 years. After controlling for confounding variables, estimated time spent with middle ear effusion (MEE) during the first 3 years of life was significantly associated with lower scores on tests of cognitive ability, speech and language, and school performance at age 7 years. The adjusted mean full scale WISC-R were 113.1 for those with least time with MEE, 107.5 for those with moderate time, and 105.4 for those with most time. Similar significant differences were found for verbal and performance IQ scores. For the Metropolitan Achievement Test, we found that middle ear disease in the first 3 years of life was associated with significantly lower scores in mathematics and reading. Similar differences were found for articulation and use of morphologic markers. After considering time spent with MEE during the first 3 years of life, time spent after age 3 years was not a significant predictor of scores on any of the tests administered.

Abstracted with permission from: Teele DW, Klein JO, Chase C, Menyuk P, Bernard A, Rosner, The Greater Boston Otitis Media Study Group. Otitis media in infancy and intellectual ability, school achievement, speech and language at age 7 years. J Infect Dis 1990, 162: 685-694.

Distinguishing Cerebrospinal Fluid Abnormalities in Children with Bacterial Meningitis and Traumatic Lumbar Puncture

The characteristics of cerebrospinal fluid (CSF) associated with traumatic lumbar puncture, defined as CSF red blood cell (RBC) count $>1000/mm^3$, were reviewed in 92 previously healthy children >1 month of age; 30 had bacterial meningitis and 62 had negative CSF cultures. The purpose was to distinguish CSF profiles of the two groups despite contamination with peripheral blood elements. In each case, white blood cell (WBC) counts were observed (O) and compared with those predicted (P), calculated as P = CSF RBC × (blood WBC/blood RBC). Comparison of O : P ratios revealed that all 30 patients with bacterial meningitis had ratios ≥1 : 28 (93%) had ratios >10, and 24 (80%) had ratios >100; by contrast, only 2 patients (3%) with culture-negative CSF had ratios >10 : 21 (34%) had ratios of 1-10, and 39 (63%) had ratios <1. Significant differences were observed in the rate of O : P ratio ≥ 1 (100% vs. 32%), CSF differential cell count predominance of polymorphonuclear leukocytes (97% vs. 11%), hypoglycorrhachia (73% vs. 3%), and positive Gram's-stained smear for pathologic organisms (80% vs. O) in those with and without bacterial meningitis, respectively ($p < 0.0001$). Thus, in children >1 month of age, CSF abnormalities associated with bacterial meningitis are rarely obscured by blood contamination

from traumatic lumbar puncture.

Abstracted with permission from: Bonadio WA, Smith DS, Goddard S, Burroughs J, Khaja G. Distinguishing cerebrospinal fluid abnormalities in children with bacterial meningitis and traumatic lumbar puncture. J Infect Dis 1990, 162: 251-254.

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NOTES AND NEWS

HONORS AND AWARDS

Dr. Savita Imandar, Consulting Pediatrician and Head of Department of Choithram Hospital and Research Centre, Indore has been presented the **"Mahila Shiromani Award, 1990"** by Shiromani Institute, New Delhi for her contribution to national development, integration, enrichment of life and for outstanding achievements in medical field especially in tribal areas of Madhya Pradesh.

Heartiest congratulations to her from the Pediatric fraternity.

–Editor