

successful bacterial eradication and clinical efficacy. Bacteriological eradication on Day 3-6 of therapy gives 93% chance of clinical success, whereas bacteriological failure results in 63% of patients (Marchant et al. J Pediatr 1992;120:72). The model can also indicate differences in the efficacies of amoxicillin/clavulanate and azithromycin in the treatment of AOM (Dagan et al., in press). The results of this study will be presented during the symposium.

This clinical model confirms that the efficacies of different antimicrobials vary and highlights the need to use potent agents that are able to eradicate the pathogen for the site of infection. Recent guidelines for the treatment of AOM from the Centers for Disease Control and Prevention (CDC) recommended oral amoxicillin as the first-line treatment, followed by oral amoxicillin/clavulanate, cefuroxime axetil or intramuscular ceftriaxone if treatment failure is apparent after 3 days.

## CURRENT ABSTRACT

### BACTERIAL MENINGITIS IN CHILDREN LESS THAN FIVE YEARS OF AGE AT A PROVINCIAL HOSPITAL IN THE PHILIPPINES

E. ABUCEJO, M.D.\*, S. LUPISAN, M.D.\*, B. QUIAMBAO, M.D.\*, L. SOMBRERO, M.D.\*, M. LUCERO, M.D.\*, R. CAPEPING, M.D.\*, J. ARDAY, M.D.\*, E. HERVA, M.D.\*, P. RUUTI, M.D.\*

**Objective:** To describe the clinical and laboratory profile of bacterial meningitis in children less than five years of age at a provincial hospital in the Philippines

**Methods:** To increase the previously infrequent use of lumbar tap for CSF samples, a guideline based on combination of neurologic symptoms and signs was developed. Blood and CSF samples were cultured for bacteria, and CSF agglutination was done for pneumococcus, meningococcus (A,C) and Haemophilus influenzae type b. Clinical and laboratory data of children less than five years old were collected from January 1995 to December 1998.

Age in months	No. of Patients	Etiologic agents
<2	6	S. pneumoniae (2), S. typhi (1), E. coli (1), P. aeruginosa (1), c. cloacae (1)
2-6	26	H. influenzae b (13), S. pneumoniae (3), S. pyogenes (3), Enterobacter sp. (1)
7-11	8	H. influenzae b (4), S. pyogenes (2), E. cloacae (1)
12-23	4	S. pneumoniae (1), S. aureus (2), Non-typhoidal Salmonella (1)
24-59	6	H. influenzae b (2), S. aureus (2), K. pneumoniae (1), Enterobacter sp. (1)
Total	44	

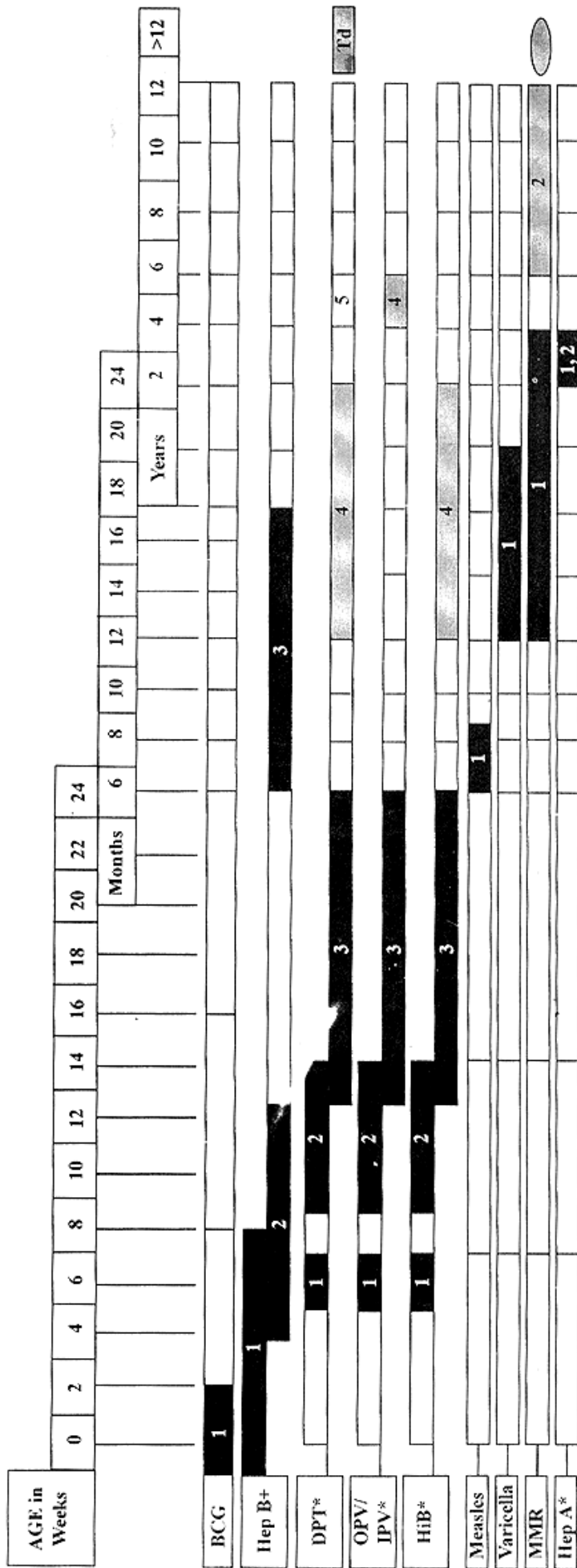
**Results:** Six hundred seventy five patients fulfilled the criteria for CSF sampling, out of which 469 (69%) had CSF sample. Bacterial pathogens were identified in 44 (9.4%) cases (table). The frequent presenting signs and symptoms were convulsion (79%) fever (68%) drowsiness/lethargy (43%), bulging anterior fontanel (41%), neck rigidity (41%), and vomiting (34%). Male: female ratio is 1.3:1 Six (13%) patients died.

The most common pathogens identified were H. influenzae type b, 19 (43%) and S. pneumoniae, 7 (16%). The findings were made in both blood and CSF culture, 21 (48%), CSF culture alone, 14 (32%), CSF latex agglutination test alone, 3 (7%), and blood culture alone with concomitant CSF pleocytosis, 6 (13%). Fourteen (32%) had history of previous antibiotic intake. All strains of S. pneumoniae and H. influenzae type b were sensitive to chloramphenicol, cotrimoxazole and ampicillin.

**Conclusion:** S. pneumoniae and H. influenzae type b are the most common bacterial causes of meningitis specially in patients less than 1 year old.

# CHILDHOOD IMMUNIZATION SCHEDULE

## Philippines, 2001



**Legend:**  
█ - primary  
█ - booster dose  
○ - catch up immunization

**Note:**  
 Typhoid vaccine is optional, but may be given at 5yrs of age with booster dose every 3-5 years

*N.B. Recommended by the Pediatric Infectious Disease Society of the Philippines (PIDSP), Philippine Pediatric Society (PPS) and the Philippine Foundation for Vaccination (PFV)*