



The Pediatric Infectious Disease Journal Newsletter

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vaccine as discussed in the February 1992 issue of the Newsletter.

THE PERILOUS PNEUMOCOCCUS We have great concern for the increasing prevalence of relatively or absolutely penicillin-resistant pneumococci coupled with the increased relative frequency of pneumococcal diseases as a result of universal *Haemophilus* vaccination. For example, we recently managed a 9 month old infant with pneumococcal meningitis who failed to respond adequately to ceftriaxone therapy. After 6 days of treatment he still had a positive CSF culture. He promptly responded to vancomycin therapy. The organism had the following minimum bactericidal concentrations (MBC), expressed in $\mu\text{g/ml}$: penicillin, 4; chloramphenicol, 8; ceftriaxone, 8; and vancomycin, 0.25. This case is similar to the case by Bradley and Connor published in our journal (*Pediatr Infect Dis J* 1991;10:871) and to a report by Sloas et al that will appear in the August issue. Additionally, we managed recently a 3 year old boy with pneumococcal endocarditis caused by a relatively penicillin resistant strain (MIC, 0.25 $\mu\text{g/ml}$). He responded satisfactorily to very high dose penicillin (500,000 units/kg daily) given intravenously for 6 weeks and the C-reactive protein and sedimentation rate returned to normal values. However, the serum bactericidal titer against the organism was only 1:8. Two weeks after stopping therapy the affected pulmonary valve was removed and the valve containing the vegetation appeared unremarkable to the surgeon. This was not the case histologically where acute inflammation and Gram positive cocci were observed. We need new agents that are active against these strains, especially when they cause infection of difficult to treat sites like the meninges or heart valves.

NPIDS SURVEY At our recent 1992 National Pediatric Infectious Disease Seminar in Washington, DC we again asked the almost 600 registrants to answer some questions regarding their prescribing habits. Of the 482

respondents the majority were pediatricians (75%), the remaining being infectious disease fellows (8%), residents (5%) family practitioners (4%) and pediatric nurse practitioners or physician assistants (4%). As to which antibiotic was their first line drug for acute otitis media, 91% said amoxicillin (87% in 1991). If that treatment fails, their usual backup drug for acute otitis media was Bactrim/Septra (29%), Augmentin (29%), Ceclor (22%) and Pediazole (17%). These results are similar to those last year except that Pediazole fell from 26% and Augmentin increased from 18%. For treatment of acute sinusitis, amoxicillin (58%) and Augmentin (26%) were the winners with Ceclor (8%) and Bactrim/Septra (6%) lagging behind.

We asked several questions regarding management of streptococcal pharyngitis. For diagnosis 45% of responders use the culture exclusively, 40% a rapid test with culture backup for a negative test, 8% a rapid test and culture for all and 7% the rapid test exclusively. The latter two options are inappropriate since a culture is not needed when the rapid test is positive (there are very few false positives) and the diagnosis will be missed too often if the rapid test is used exclusively (there can be from 10-35% false negative results). Regarding management of the child who has a clinical and bacteriological relapse of strep throat after penicillin therapy, 50% preferred a cephalosporin and 38% penicillin for retreatment. Rifampin and Bicillin or clindamycin was the choice of 6% each. We were surprised that 13% of responders routinely obtain a throat culture after a successful course of antibiotics for strep throat. (It is usually not advisable.)

For the choice of *Haemophilus influenzae* type b vaccine, 70% use HibTITER, 16% ProHIBit and 14% PedvaxHIB. Twenty-eight percent of physicians routinely start hepatitis B immunization in all newborns. We asked the registrants what they prescribed for acute bronchitis and were modestly surprised that 52% use an antibiotic whereas 48% administer symptomatic therapy.

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1 May 1993.

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Dear Mr Birch,

This is a follow-up letter regarding the Haemophilus vaccine, because the most recent issue of the Lancet has confirmed suspicions that while this vaccine may assist in eradicating Hib, the vaccine will essentially leave a microbial "hole" which appears to be being filled with other organisms.

This has happened in the past as detailed in a joint letter to the Infectious Diseases Journal amongst the enclosed documentation.

I believe that the subject of this letter could perhaps have more importance than my previous letter, because the real question that parents will want the answer to, is this:

Will this vaccine solve the problem of my children catching Haemophilus? In other words, will it work? The answer to this one is according to Heikki Peltola, No, not entirely, (See latest Lancet) because a vaccine cannot be given to prevent the non-capsular haemophilus type B, or the non-serotypable haemophilus strains, which appear to be becoming more prevalent with the use of the Haemophilus B vaccine.

On top of that, parents may not think to ask another perhaps more important question:

Will Haemophilus be replaced with something which is:

- a) just as bad, and
- b) potentially untreatable?

Most parents would not know to ask that question, because it would not occur to them that this could happen.

The answer to this question could well be as follows:

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"We need new agents that are active against these strains, especially when they cause infection of difficult to treat sites like the meninges or heart valves."

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