Management of Community-Acquired Pneumonia in Infants and Children Older Than 3 Months

To the Editor—Although Bradley et al [1] provided guidelines for the management of community-acquired pneumonia (CAP) in otherwise healthy infants and children, some of their recommendations seem to be debatable and I wonder how they reached a consensus.

First of all, what is the evidence supporting the systematic hospitalization of infants aged 3–6 months with suspected bacterial CAP? All of the other guidelines recommend the routine hospitalization of neonates with CAP, but none of them suggests the hospitalization of infants aged 3–6 months in the absence of severity criteria [2–4].

Second, what rapid tests do the authors suggest for the diagnosis of Mycoplasma pneumoniae infection? Evaluating M. pneumoniae antibody titers in acute sera and using kits to detect M. pneumoniae DNA in respiratory secretions are not very sensitive methods [5].

Third, the recommendation to use influenza antiviral therapy in outpatients is extremely broad and may cause antiviral abuse. There is limited evidence concerning the benefits of antiviral therapy in patients with influenza-related CAP, and it seems more reasonable to suggest neuraminidase inhibitors in severe cases that require hospitalization, or in children with chronic underlying diseases, possibly in the presence of positive diagnostic tests for influenza viruses [6]. Moreover, because it is impossible to differentiate influenza A and B infections in children or the emergence of resistance to antiviral drugs [6], what is the reason for using amantadine and rimantadine?

Fourth, how do the authors suggest differentiating presumed bacterial CAP, presumed atypical CAP, and presumed influenza-related CAP? Table 7 concerning empiric therapy does not seem to be very useful because a number of studies have shown that it is not possible to differentiate etiology on the basis of clinical, laboratory, or radiological findings [7, 8]. For this reason, empiric therapy is usually chosen on the basis of diagnostic algorithms that begin with the age of the patient and then consider epidemiological factors and disease severity.

Fifth, because we have effective alternatives, why should we use quinolones in the empiric therapy of pediatric CAP? They are not approved for the regular treatment of children and they may select resistant strains.

Sixth, what studies support high-dose amoxicillin (ie, a time-dependent antibiotic) in 2 instead of 3 divided doses in pediatric CAP?

Seventh, in the case of a child with CAP who does not respond to first-line treatment, do the authors really recommend a percutaneous lung aspirate instead of a second-line antimicrobial therapy in clinical practice? I would have expected them to make suggestions concerning second-line antibiotics rather than invasive diagnostic tests that are usually limited to severe or complicated cases of CAP [9].

Eighth, what high-quality evidence shows that influenza vaccination prevents CAP? I understand that influenza vaccination is universally recommended in the United States, but the claim that influenza vaccination has positive effects on CAP is mainly based on indirect data even in the guidelines [10].

Finally, how is it possible that a guideline can make such a number of strong recommendations on the basis of such low- or weak-quality evidence?

Note

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The author has submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

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