

Table 1. Patients from whom high-level penicillin-resistant *Streptococcus pneumoniae* strains were isolated.

| Patient | Age, years | Comorbidity | Penicillin MIC, $\mu\text{g}/\text{mL}$ | Amoxicillin MIC, $\mu\text{g}/\text{mL}$ | Initial antibiotic therapy (dosage) | Died |
|---------|------------|---|---|--|-------------------------------------|------|
| 1 | 55 | Neurologic conditions and suspected aspiration | 4 | 8 | Amox-clav (2000/200 mg iv q8h) | Yes |
| 2 | 92 | Heart failure, renal failure, neurologic conditions, and previous β -lactam therapy | 4 | 8 | Amox-clav (2000/200 mg iv q8h) | No |
| 3 | 69 | Diabetes, renal failure, aspiration, and neoplastic and cardiologic conditions | 4 | 8 | Amox-clav (2000/200 mg iv q8h) | Yes |

NOTE. High-level resistance was defined by an MIC of ≥ 4 $\mu\text{g}/\text{mL}$. Amox-clav, amoxicillin-clavulanic acid.

nism of resistance is typically high grade, as you can see in our study. To add to the confusion, the emergence of resistance to macrolide agents during treatment has been recently reported [9]. Being involved in this debate, we conclude that prudence in prescribing practices is probably well advised.

Nor can we forget that our study reflects the way in which its participating hospitals work. There is a possibility that some bias has been introduced; for example, the timing of administration of the first dose could have varied from one hospital to another, or the criteria for admission to the intensive care unit may have been different among hospitals. This possibility of the introduction of bias was our reasoning for not being conclusive in our study.

When we say “The impact of drug-resistant *S. pneumoniae* on morbidity and mortality is still controversial” [2, p. 795.], we are only echoing the enormous body of literature that this topic has generated. What is more, variations of this same phrase are generically used as an introduction to the theme of drug resistance in many articles, and, without going into too much detail, a variation even makes an appearance in the magnificent article that Dr. Yu coauthored recently [10].

Concerning your request for more information about factors related to the morbidity and/or mortality associated with episodes of illness in patients with elevated MICs of penicillin, we have provided a table (table 1) that shows outcome data and clinical data for patients with MICs

of penicillin and amoxicillin of ≥ 4 $\mu\text{g}/\text{mL}$ in our series. In addition, we have analyzed different factors related to mortality in patients with pneumococcal pneumonia. The results of our analysis are in the process of being reviewed for publication.

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Visceral Leishmaniasis as a Cause of Anemia in HIV-Infected Patients

SIR—In their recent article, Volberding et al. [1] offer an accurate analysis of the possible causes of anemia in HIV-positive patients and give useful information about its management. However, among the treatable causes of anemia reported in table 3, the authors did not mention several opportunistic infections, such as leishmaniasis, histoplasmosis, tuberculosis, and pneumocystosis. Among the above-mentioned infections, visceral leishmaniasis is particularly frequent in the Medi-

terranean basin [2], but there is evidence that its occurrence will increase in areas such as Brazil and India, where overlapping of leishmaniasis and HIV infection is an emerging problem [3].

Although visceral leishmaniasis is not considered an AIDS-defining disease, it behaves like an opportunistic infection, presenting in patients with <200 CD4 lymphocytes/ μ L in 92% of cases. Interestingly, in geographic areas where visceral leishmaniasis is endemic, AIDS appears to increase the risk of clinical visceral leishmaniasis by 100–1000 times [4]. As far as diagnosis is concerned, it should be highlighted that serologic tests are usually unreliable because such findings are positive only in 40–50% of HIV/*Leishmania* coinfecting patients [4]; furthermore, bone marrow microscopy and culture also have the limitations of low sensitivity, compared with the results from HIV-negative patients, and they are especially time consuming [4, 5]. In patients with HIV/*Leishmania* coinfection, PCR analysis of either peripheral blood or bone marrow aspirate specimens has emerged as the most sensitive and specific diagnostic method, and use of PCR should be added to the proposed diagnostic algorithm for anemia in HIV-infected patients [6, 7].

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