due to group A streptococci and E. coli [3], and the other listed group A streptococci as one of several pathogens isolated concomitantly with F. necrophorum [5]. To our knowledge, S. pyogenes has not been previously described as the sole pathogen in a patient with postanginal sepsis. This case expands the spectrum of disease caused by S. pyogenes to include typical Lemierre syndrome.

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Potential conflicts of interest. All authors: no conflicts.

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References


Usefulness of the Streptococcus pneumoniae Urinary Antigen Test in the Treatment of Community-Acquired Pneumonia

To prevent further development of resistance in respiratory pathogens, a judicious use of antibiotics for respiratory tract infections has been proposed [1]. Recently, Guchev et al. [2] demonstrated that amoxicillin treatment could successfully be targeted by use of the Urinary Antigen Test (UAT) for Streptococcus pneumoniae (Binax) in nonsevere community-acquired pneumonia (CAP). However, 78% of the study patients had negative UAT results and received empirical treatment with clarithromycin, in accordance with the CAP guidelines of the American Thoracic Society [3] and the Infectious Disease Society of America [4]. Although antibiotic treatment active against atypical pathogens is routinely recommended in these guidelines, such treatment was not superior to β-lactam monotherapy, unless Legionella species was the cause of infection, in 2 recent meta-analyses of treatment of CAP [5, 6].

Thus, β-lactam monotherapy can be used empirically and does not need to be targeted when used to treat CAP. Is the UAT, then, still useful in the treatment of CAP? Could the test be used to anticipate the course in patients treated with β-lactam monotherapy?

In 215 hospitalized CAP patients who have been previously described [7], the treatment choices were based on the clinicians’ own decisions. Apart from the UAT, cultures of blood samples and respiratory tract specimens and respiratory tract PCR for Mycoplasma pneumoniae and Chlamydia pneumoniae were performed for all patients. The UAT and PCR analyses were performed at the end of the study and could not influence the antibiotic choices. The study described in this letter was approved by the ethics committee of the Örebro County Council.

β-Lactam monotherapy was the initial hospital treatment for 152 patients (71%), who had a median age of 74 years (range, 18–96 years). Thirty-eight patients (25%) had positive UAT results. The hospital course was considered to be successful if the patient’s condition improved and clinically stabilized and if the patient was discharged from the hospital during or after completion of β-lactam monotherapy. Changes in treatment within the β-lactam group were not considered to be failures.

The success rates in relation to the result of the UAT are presented in table 1. Overall, the patients with positive test results had a higher success rate than did patients with negative results (P = .034, by the χ² test), although 48% of patients with negative test results belonged to severity risk classes IV–V, compared with 39% of patients with positive results. Of the 122 patients with a successful hospital course, 2 patients with negative UAT results died within 30 days after hospitalization. Among the 30 patients who did not have

<table>
<thead>
<tr>
<th>Table 1. Rates of hospital success with β-lactam monotherapy in relation to the results of the Streptococcus pneumoniae urinary antigen test (UAT) in 152 hospitalized patients with pneumonia.</th>
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</thead>
<tbody>
<tr>
<td><strong>Patient category</strong></td>
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<td>----------------------</td>
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<tr>
<td><strong>All</strong></td>
</tr>
<tr>
<td>Severity risk classes I–III</td>
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<tr>
<td>Severity risk classes IV–V</td>
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<tr>
<td><strong>Streptococcus pneumoniae</strong> identified in culture</td>
</tr>
<tr>
<td><strong>Mycoplasma pneumoniae or Chlamydia pneumoniae</strong> identified by PCR</td>
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</tbody>
</table>

NOTE. Hospital success is defined as the improvement and clinical stability of a patient’s condition followed by discharge from the hospital.

a Data are proportion of patients (no. with successful therapy/no. in category).
a successful hospital course, only 1 with a negative UAT result died. The remaining 29 patients, including 26 with negative UAT results, were subjected to treatment changes and received treatment with non-β-lactam antibiotics. All of these patients’ conditions improved and clinically stabilized, and the patients were discharged from the hospital.

Because 149 (98%) of the 152 patients were alive and discharged from the hospital on day 30 of hospitalization, β-lactam monotherapy appears to be a safe initial treatment of CAP. Although the UAT is not needed to target β-lactam monotherapy, it still appears to be useful in the management of CAP. A positive test result can support treatment with narrow-spectrum β-lactam antibiotics and can be used to prevent unnecessary antibiotic changes. The present study shows that antibiotic changes will most often not be needed in patients with positive test results but will be needed more frequently in patients with negative test results. When a UAT result is negative, diagnostic tests for conventional and atypical pathogens are useful to gain support for the ongoing treatment or suggestions for treatment alterations (table 1).

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References


Thrombocytopenia and Plasmodium vivax Malaria

Sir—We were amazed by the letter of Rodriguez-Morales et al. [1] on the occurrence of thrombocytopenia in Plasmodium vivax malaria because some potentially misleading messages are reported. First of all, the authors affirm that “thrombocytopenia is infrequently reported for P. vivax malaria” [1, p. 130]. However, in one of the major textbooks on tropical medicine, White [2] reports that “thrombocytopenia is common to all four human malarial species” (p. 1235). Likewise, 2 recent studies [3, 4] clearly demonstrate the high predictive value of thrombocytopenia in the diagnosis of imported malaria, with ORs of 12.4 and 16.5, respectively. However, it might be observed that in both of these studies the frequency of Plasmodium falciparum malaria was high (66% in [3] and 90% in [4]) but the high likelihood of thrombocytopenia with P. vivax malaria was shown by Erhart et al. [5] in a study conducted in Thailand with 646 case patients (OR, 12.5). In our recent experience with 117 cases of imported malaria in our ward, observed during a 7-year period (1997–2004), 24 patients (20.5%) had been infected with P. vivax malaria, and, at admission, the median platelet count was 65,000 platelets/μL (authors’ unpublished data). As shown in table 1, in 5 of 6 studies on P. vivax malaria, the median platelet count was consistently <150,000 platelets/μL [6–10]. Therefore, we believe that thrombocytopenia should be considered a common hematological feature of P. vivax malaria.

Furthermore, we did not observe any case involving bleeding, despite the high percentage of patients affected by thrombocytopenia—an observation that is in keeping with the experiences of Newton et al. [10] and Oh et al. [8]. Because of this, it was unexpected that Rodriguez-Morales et al. [1] reported a high percentage of patients (44% of those with <60,000 platelets/μL) affected by P. vivax malaria who underwent platelet transfusion. They fail to mention the reasons for platelet transfusion; however, it should be noted that after starting treatment for malaria, the platelet count generally rises rapidly; bleeding in the absence of concomitant disseminated intravascular coagulation is rare, and platelet transfusion is rarely, if ever, required.

Finally, the rate of anemia at admission reported by Rodriguez-Morales et al. [1] (observed in 96. 6% of patients)—although similar to the rate reported by Kottwal et al. [6] in US rangers—is unusually high. In the majority of reports in the literature, as well as in our experience, anemia occurs in no more than 30% of patients. The high rate of anemia reported by Rodriguez-Morales [1] might be correlated with patients’ delayed presentation, or with the concomitant presence of other possible causes (i.e., malnutrition or parasitic diseases). However, it should be emphasized that the association of anemia