grounds for exclusion of those studies” [8, section 6.10]. Our 11 criteria were determined under the assumption that failure to meet just 1 criterion could potentially invalidate an entire study. The Cochrane Handbook continues with the statement that “if reviewers raise the methodological cut-point for including studies, there will be less variation in validity among the included reports” [8, section 6.10]. Meta-analysis was not attempted in our review, because only 2 studies were deemed experimentally sound.

With regard to vitamin C, the purpose of our study was not to review vitamin C studies and their validity. The studies of Diehl [9], Hayden et al. [10], and Chalmers [11] were cited in our review [3] to show the importance of proof of blinding and to demonstrate the placebo effect in action. The importance of proof of blinding has been established as a vital component of experimental design. The Cochrane Handbook states “there is empirical evidence suggesting that...lack of double blinding results in overestimates of the effects of treatment” [8, section 6.11]. We stand by the results reported in our review.

Acknowledgments

Potential conflicts of interest. T.J.C. and J.M.G.: no conflicts.
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References


Moxifloxacin Is Efficacious for Treatment of Community-Acquired Lung Abscesses in Adults

Sir—We read with interest the study by Wang et al. [1] and the accompanying editorial by Bartlett [2] on the topic of lung abscesses. Herein, we report our experience with moxifloxacin in the treatment of community-acquired lung abscesses in adults.

We administered moxifloxacin to 6 patients with lung abscess (table 1). Predisposing conditions for lung abscess included alcohol abuse, seizure disorder, gingivitis, and chronic obstructive pulmonary disease. All of the patients were men, with a mean age of 49 years (range, 39–57 years). Diagnosis of lung abscess was established on the basis of clinical symptoms and signs and by the findings of imaging studies (chest radiography, with confirmation by chest CT). Microbiologic data were unrevealing. Moxifloxacin (400 mg q.d.) was administered orally to all subjects after a short course (median duration, 8 days; range, 1–19 days) of “standard” initial treatment with various antimicrobials (e.g., ampicillin-sulbactam, piperacillin-tazobactam, clindamycin, ceftriaxone, and levofloxacin). Duration of moxifloxacin treatment ranged from 4 to 8 weeks (mean duration, 6 weeks). All patients achieved clinical cure and resolution of the abnormal imaging findings. There were no relapses of lung abscess during the follow-up period, which ranged in duration from 6 months to 3 years. Moxifloxacin was very well tolerated, and the patients did not report experiencing any significant adverse effects.

The typical treatment strategy for lung abscess is administration of prolonged antibiotic therapy until the abnormal imaging findings resolve or a small, stable, residual lesion develops [3]. The current standard antibiotic regimens include clindamycin or β-lactam/β-lactamase inhibitor combinations [3–7]. The limitations of clindamycin currently include the requirement of multiple daily doses (given every 6–8 h) and the changing microbiology of lung abscess (i.e., the lack of coverage for gram-negative bacilli—in particular, Klebsiella pneumoniae—and increasing resistance among both anaerobes and Streptococcus milleri group isolates) [1]. This has prompted certain investigators to include a second- or third-generation cephalosporin with clindamycin for treatment of this entity [8]. The prototype lung abscess agent of the β-lactam/β-lactamase inhibitor combination group is amoxicillin-clavulanate, which also requires multiple daily dosing (every 8-12 h) and is contraindicated for patients who are allergic to penicillin.

Moxifloxacin is a 6-fluoro-8-methoxy quinolone with potent activity against gram-positive, gram-negative, atypical, and anaerobic bacteria [8, 9]. Moxifloxacin has excellent pharmacokinetics, with drug concentrations in the all of the compartments of the respiratory system that are well above the MICs of the pathogens...
expected to cause respiratory system infections, including lung abscess [9, 10]. This makes moxifloxacin a highly effective drug for bacterial eradication, and its efficacy has been demonstrated in several clinical trials in patients with community-acquired respiratory system infections [9, 10]. Additional advantage of moxifloxacin is once daily administration, which translates to better patient adherence to therapy, and the low propensity for drug interactions [9, 10]. To our knowledge this is the first study showing the utility of moxifloxacin for treatment of lung abscess. We conclude that moxifloxacin is a safe and effective treatment of lung abscess. Excellent oral bioavailability and once daily dosing make it very attractive option for long-term management of lung abscess. Additional prospective studies are required to validate these data.

Acknowledgments

Potential conflicts of interest. All authors: no conflicts.

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References


Table 1. Characteristics of adult men with community-acquired lung abscess who received moxifloxacin.

<table>
<thead>
<tr>
<th>Patient</th>
<th>Age in years</th>
<th>Site of infection</th>
<th>Risk factor for lung abscess</th>
<th>Intervention</th>
<th>Treatment duration, days</th>
<th>Outcome</th>
<th>Duration of follow-up</th>
<th>Adverse events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>48</td>
<td>RUL</td>
<td>Alcohol use and gingivitis</td>
<td>None</td>
<td>28</td>
<td>Clinical cure</td>
<td>1 Year</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>43</td>
<td>LUL</td>
<td>Alcohol use, gingivitis, and COPD</td>
<td>None</td>
<td>42</td>
<td>Clinical cure</td>
<td>1 Year</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>54</td>
<td>LUL</td>
<td>Alcohol use and COPD</td>
<td>None</td>
<td>42</td>
<td>Clinical cure</td>
<td>3 Years</td>
<td>None</td>
</tr>
<tr>
<td>4</td>
<td>39</td>
<td>LLL</td>
<td>None</td>
<td>Percutaneous drainage</td>
<td>56</td>
<td>Clinical cure</td>
<td>3 Years</td>
<td>None</td>
</tr>
<tr>
<td>5</td>
<td>54</td>
<td>RUL</td>
<td>Alcohol use, gingivitis, seizure, and COPD</td>
<td>Percutaneous drainage</td>
<td>42</td>
<td>Clinical cure</td>
<td>1 Year</td>
<td>None</td>
</tr>
<tr>
<td>6</td>
<td>57</td>
<td>RLL</td>
<td>Alcohol use, gingivitis, and COPD</td>
<td>None</td>
<td>42</td>
<td>Clinical cure</td>
<td>6 Months</td>
<td>None</td>
</tr>
</tbody>
</table>

NOTE. COPD, chronic obstructive pulmonary disease; LLL, left lower lobe; LUL, left upper lobe; RUL, right upper lobe.

Persistent Culture-Positive Legionella Infection in an Immunocompetent Adult

Sir—We read with great interest the report by O’Reilly et al. [1] describing persistent Legionella infection in an immunocompromised patient after chemotherapy. The authors reported severe pneumonia caused by Legionella pneumophila that grew on culture over a period of 30 days, despite administration of appropriate antibiotic therapy. The prolonged infection was explained by the patient’s impaired cell-mediated immunity, as well as an occult pulmonary abscess. A few additional cases of prolonged Legionella infection were reported in immunocompromised persons, including HIV-infected patients, sometimes concomitant with a nidus of infection, such as a pulmonary abscess [2–4].

In our opinion, it is important to report a case of refractory Legionella infection in an immunocompetent 74-year-old Bosnian man who was admitted to our hospital for neurosurgical meningeoma resection. The findings of a presurgical laboratory examination and a chest radiograph were unremarkable. Medical history revealed peripheral arterial occlusive disease. Immunosuppressive medications (e.g., steroids) were not administered during the neurosurgical intervention. Two weeks after successful surgical intervention, the patient developed clinical, laboratory, and radiological signs compatible...