Verbal advice plus an information leaflet reduced antibiotic use in acute bronchitis


QUESTION: In patients presenting with acute bronchitis, does verbal advice plus an information leaflet describing the uncertain value of antibiotics reduce antibiotic use more than verbal advice alone?

Design
Randomised (unclear allocation concealment*), blinded (clinicians and data collectors),† controlled trial with 4 weeks of follow up.

Setting
3 general practices in Nottingham, UK.

Patients
259 patients ≥ 16 years of age who had acute bronchitis (ie, illness for ≤ 21 d; main symptom of cough; ≥ 1 of sputum production, dyspnoea, wheeze, or chest discomfort or pain; and no alternative explanation) and were not receiving medical attention for an underlying disease, such as asthma, heart disease, or diabetes. 47 patients were judged to need antibiotics immediately and were subsequently randomly allocated (mean age 45 y, 58% women). 205 of these patients (97%) were included in the analysis.

Intervention
All patients received a prescription for antibiotics. 106 patients were allocated to verbal advice (read from a prompt card) by the general practitioner plus an information leaflet that described the natural course of respiratory illnesses.6 Patients who received verbal advice alone (read from a prompt card) by the general practitioner were subsequently randomised (mean age 45 y, 58% women). 205 of these patients (97%) were included in the analysis.

Main outcome measures
Patient use of prescribed antibiotics (self report) within the next 2 weeks and initiation of further consultation for the same symptoms within the next 4 weeks.

Main results
Fewer patients who received verbal advice plus the information leaflet took their antibiotics than did patients who received verbal advice alone (table). The groups did not differ for reconsultation rates at 4 weeks (11% v 13%, p=0.54)†.

Conclusion
Verbal advice plus an information leaflet describing the uncertain value of antibiotics reduced antibiotic use more than did verbal advice alone in patients with acute bronchitis.

*See glossary.
†Calculated from data in article.
‡Abbreviations defined in glossary; RRR and CI calculated from data in article.

Physician verbal advice plus an information leaflet vs verbal advice alone for acute bronchitis

<table>
<thead>
<tr>
<th>Outcome at 2 weeks</th>
<th>Verbal advice plus leaflet</th>
<th>Verbal advice alone</th>
<th>RRR (95% CI)</th>
<th>NNT (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antibiotic use</td>
<td>47%</td>
<td>62%</td>
<td>24% (3 to 42)</td>
<td>7 (4 to 65)</td>
</tr>
</tbody>
</table>

COMMENTARY

Whether to prescribe an antibiotic for a lower respiratory tract infection is a common dilemma in primary care. The precise diagnosis is often unclear.1 Physicians are uncomfortable about prescribing antibiotics2 when the evidence suggests little benefit,3 but they have concerns about not prescribing them for patients who might benefit. They also wish to maintain good relationships2 with patients who almost always expect an antibiotic.1

The “delayed prescription” along with a discussion of the pros and cons of antibiotics provide a useful escape from this dilemma: this technique avoids a power struggle and invites patients to participate in the decision. For patients with pharyngitis or otitis, delayed prescribing has not only decreased antibiotic use but has also changed patient perceptions about respiratory infections and decreased subsequent visits for uncomplicated respiratory illnesses.4

Although the “delayed prescription” approach is appealing, it is clearly not the final answer. Half of the patients in the trial by Macfarlane et al took the antibiotics that their physicians felt were unnecessary. Nevertheless, many patients respond well to the information that no antibiotic is required and are happy to leave the physician’s office without a prescription. For patients who still feel they need an antibiotic, a delayed prescription is a reasonable choice and should be accompanied by written materials.

Lorne A Becker, MD
SUNY Upstate Medical University
Syracuse, New York, USA