Prescribing antibiotics for sore throat increased reattendance


Objective
To determine the reattendance and complication rates of patients with sore throat who received immediate prescription of antibiotics compared with delayed or no prescription.

Design
Randomised controlled trial with mean 1-year follow-up.

Setting
11 general practices in England.

Patients
716 patients (76% > age 12 yr, 64% women) who had sore throat and abnormal physical signs localising to the throat (inflamed tonsils or pharynx, purulent exudate, faucial or palatal inflammation, or cervical adenopathy).* Clinical notes were available for 94% of patients.

Intervention
[Patients were allocated to phenoxymethylpenicillin, 250 mg 4 times/d for 10 days (n = 246), no antibiotics (n = 232), or a prescription for penicillin to be filled if the sore throat did not start to improve within 3 days (n = 238).]†

Main outcome measures
Rate of reattendance, early returns (within 2 wk), and complications (otitis media, sinusitis, or quinsy).

Main results
Analysis was by intention to treat. More patients who received immediate prescription for antibiotics returned to the doctor's office with sore throat than did patients who received delayed or no prescription (38% vs 27%, adjusted hazard ratio [HR] for return 1.39, 95% CI 1.03 to 1.89). Receipt of a prescription to treat sore throat within the past year increased the effect (HR 1.69, CI 1.20 to 2.37). Immediate prescription of antibiotics compared with no or delayed prescription did not affect the early return rate (5.5% vs 6.2%) (CI for the 0.7% absolute risk reduction −3.4 to 4.2, P = 0.71)† or the complication rate (0.8% vs 0.7%) (CI for the 0.1% absolute risk increase −1.3 to 2.4, P = 0.82)†. Among the 3 groups, the delayed group had the lowest rate of reattendance.

Conclusions
Immediate prescribing of antibiotics for sore throat prompted greater reattendance at the doctor's office than did giving no antibiotics or a delayed prescription. Complications and early return were rare for all 3 prescribing strategies.

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For article reprint: Dr. P. Little, Primary Medical Care, Faculty of Health, Medicine, and Biological Sciences, Alderney Health Centre, Southampton University, Southampton S016 5ST, England, UK. FAX 44-1703-701125.


*Numbers calculated from data in article.

References

Commentary
Physicians commonly medicate patients with pharyngitis regardless of their likelihood of having group A streptococcal (GAS) pharyngitis (1). No strong evidence supports this practice. In this study and in an earlier report (2), Little and colleagues found that empiric treatment of patients with pharyngitis not stratified by the likelihood or presence of GAS did not prompt faster clinical recovery or resolution of symptoms. The study may have had insufficient power to detect either small clinical improvements or an effect on supplicative complications. Nonetheless, given the known drawbacks of antibiotic therapy, the results of these studies collectively argue against the common practice of prescribing antibiotics for patients with sore throat regardless of their likelihood of having GAS pharyngitis.

The study by Little and colleagues does not address the vexing controversy (3, 4) about whether to treat patients with probable (or even definite) GAS pharyngitis. The answer depends on several factors, including the prevalence of GAS pharyngitis in the community; the ability of signs, symptoms, rapid tests, and throat swab cultures to diagnose GAS; the likelihood of such outcomes as acute rheumatic fever and supplicative complications in patients with GAS pharyngitis, depending on whether they are treated with antibiotics; the likelihood of adverse reactions to antibiotics; and the importance and costs of these outcomes to patients. Decision analyses in which attempts have been made to balance these factors suggest that patients with a likelihood of GAS pharyngitis that exceeds a particular threshold should be treated (5-7).

Roy M. Poses, MD
Brown University
Providence, Rhode Island, USA