Reply to Agger and Kowalski

TO THE EDITOR—We thank Drs Agger and Kowalski for their letter, which permits us to clarify several important points.

First, it is incorrect to state that “treatment of Group A Streptococcal (GAS) pharyngitis . . . reduces pain symptoms by about one day.” The cited Cochrane review encompassed 27 trials including patients presenting with sore throat from any cause [1], only a minority of whom had GAS infections. This underestimates the benefits of antibiotic treatment in patients who have GAS pharyngitis. The largest of these randomized double-blind placebo-controlled trials found that antibiotics shorten the duration of symptoms by a mean of 2.5 days in patients with GAS detected by culture [2].

Second, it is inappropriate to draw conclusions about the ability of antibiotics to prevent complications of GAS pharyngitis from a retrospective study, as Agger and Kowalski attempt to do. This is because it is not possible to determine whether patients who received antibiotics following a positive culture result might have gone on to experience complications in the absence of treatment. For this question, one must look at the results of randomized clinical trials. The Cochrane analysis of randomized trials involving 12,835 patients showed that antibiotics significantly reduce the likelihood of suppurative complications such as peritonsillar abscess (risk ratio, 0.15) and otitis media (risk ratio, 0.30), as well as the important nonsuppurative complication of rheumatic fever (risk ratio, 0.27) [1]. A recently completed observational cohort study has affirmed the ability of antibiotics to prevent suppurative complications of pharyngitis [3].

Third, Agger and Kowalski suggest that patients excluded from the study may have had milder illness or lower colony counts. Although it is not possible to determine the severity of illness in these patients because their medical records are unavailable, most (63%) had colony counts of 2+ or greater. Regardless of their clinical status, the conclusion remains that rapid streptococcal tests miss a substantial number of patients with severe symptoms and high organism burdens [4].

Studies have consistently demonstrated that patients with GAS pharyngitis can benefit from antibiotic treatment [1–3].

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and that rapid tests are less sensitive than culture for the detection of GAS [4, 5]. The primary contribution of our recent study is to show that patients with negative rapid tests and positive cultures may experience serious complications and often have symptoms that are sufficiently severe to warrant treatment [4]. Clinical guidelines that fail to appreciate the value of reflexive culture are therefore far from perfect.

Note

Potential conflicts of interest. All authors: No potential conflicts of interest.

All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

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