Dexamethasone for Bronchiolitis

TO THE EDITOR: The prospective trial of dexamethasone for bronchiolitis in infants, conducted by the Bronchiolitis Study Group of the Pediatric Emergency Care Applied Research Network (PECARN) and reported by Corneli et al. (July 26 issue), appears to demonstrate a lack of efficacy of oral dexamethasone in infants with a first episode of wheezing diagnosed as bronchiolitis. Although the authors aptly conclude that dexamethasone did not provide a benefit in the first 7 days after treatment, they fail to address the fact that treatment with oral steroids may prevent recurrent wheezing in the months after infection, particularly in first-time wheezing induced by rhinovirus. This is significant, given that rhinovirus-induced wheezing is the second most common cause of early wheezing and is an emerging risk factor for recurrent wheezing. Are there follow-up data on the condition of the children studied that can address this question?

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TO THE EDITOR: In Corneli and colleagues’ description of the inclusion and exclusion criteria for their study, it is not clear whether other drugs had been used to treat the bronchiolitis. It may be useful to know whether patients received, either before or during the study, treatment with macrolide antibiotics. In a recent study, treatment with clarithromycin had significant effects on the clinical and laboratory findings in patients with respiratory syncytial virus bronchiolitis.

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TO THE EDITOR: In the trial reported by Corneli et al., infants with bronchiolitis did not benefit from oral dexamethasone, but the case definition required wheezing. In the United Kingdom and Australia, wheezing is a nonobligate diagnostic feature of bronchiolitis.

sign, whereas widespread fine crepitations constitute the hallmark of the disease. The important subgroup of children with bilateral crackles only was excluded from the study, and it is possible that such children would have a different response.1 Differences between U.S. and non-U.S. definitions of bronchiolitis make generalization of the findings difficult.

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THE AUTHORS REPLY: In response to La Shell and Calabria: we did not collect follow-up data on the patients in our study beyond 7 to 10 days. We note that rhinovirus is not a common cause of bronchiolitis. The widespread use of glucocorticoid medication for this common condition is not without risks, which would have to be considered against any possible benefit.

In response to Casoni and Poletti: we did not ascertain which medications (other than those affecting inclusion) the patients received before enrollment in the study. The use of macrolide antibiotics is not common in the treatment of viral bronchiolitis in the United States.

Finally, we agree with Stafler that different definitions of disease have been a problem in past research on bronchiolitis. In typical U.S. usage, however, the term “wheeze,” when used in reference to infants with bronchiolitis, encompasses expiratory noises that could be described as fine crackles or crepitations. We believe that our findings are likely to pertain to patients with bronchiolitis worldwide.

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Peginterferon Alfa-2a and Ribavirin for 16 or 24 Weeks in HCV

TO THE EDITOR: Shiffman et al. (July 12 issue)1 report the results of the ACCELERATE study, which compared 16 weeks with 24 weeks of peginterferon alfa-2a and ribavirin in patients with hepatitis C virus (HCV). The difference in the rate of sustained virologic response after the standard treatment duration as compared with the shorter duration was 2 percentage points higher than the preestablished 6% margin for noninferiority. This led the investigators to endorse a treatment duration of 24 weeks, even though more patients in the 24-week group (absolute difference, 6%) were unable to tolerate this schedule. By considering a 12.5% margin, we found that treatment for 12 weeks was not inferior to treatment for 24 weeks.2 Other trials, with a more liberal margin of 2%, have also shown equal rates.3,4 There is no consensus on what margin is appropriate.

A more urgent task is the delineation of features of patients that might assist in assigning them to a short or standard treatment duration. In both the ACCELERATE study and our study, the former schedule was advantageous for patients with rapid virologic response or low viremia. Patients with mild fibrosis might also benefit, but data for these patients are missing in Figure 4 of the article.

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