Impact of fluctuating patterns of bronchiolitis epidemics in infants

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To the Editor,

Walker and coauthors [5] recently reported on the effects of introducing a new clinical care pathway in the management of bronchiolitis in infants aged below 6 months. They observed a significant reduction in the use of salbutamol and ipratropium bromide, and an overall reduction in the duration of hospital stay while the prescription rate of antibiotics remained unchanged. In their study two seasons (2003/2004 and 2004/2005) were compared with the following five seasons and findings were attributed to the introduction of a new clinical pathway. If one compared the first two seasons with the 2007/2008 and 2008/2009 seasons, no difference in the length of hospital stay would have been observed questioning the real effects of this new clinical pathway. The fluctuating patterns of bronchiolitis epidemics throughout the northern hemisphere are well-known, making comparisons between seasons and any connections with changed treatment regimens highly sophisticated and sometimes speculative. In a recent study, we demonstrated long-term epidemiological data on respiratory syncytial virus (RSV) seasons over 16 years [3]. Data would have allowed us to compare a lot of clinical parameters in the management of infants being hospitalised for RSV lower respiratory tract infection that might have resulted in significant findings over some seasons, but at least might have been found only by change due to the changing patterns of the epidemic seasons.

Another interesting finding of the study of Walker et al. [5] is the unchanged rate of antibiotic treatment in up to 25% of bronchiolitis cases. Real bacterial coinfection is reported in up to 2 % of cases being not admitted to the intensive care unit [2]. Thus, efforts are still needed to reduce antibiotic prescription in infants hospitalised due to bronchiolitis even in the case of elevated inflammatory indices except when septic work-up reveals positive bacterial cultures [1]. But this might not be the case for infants with severe bronchiolitis being admitted to the ICU [4] that have significantly higher rates of bacterial coinfections.

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