Acetaminophen versus Ibuprofen in Mild Persistent Asthma

William J. Sheehan, M.D. and Wanda Phipatanakul, M.D.
Boston Children’s Hospital, Boston, MA

THE AUTHORS REPLY

In the Discussion section of our article, we acknowledge that “without a placebo group, we cannot exclude the possibility that both ibuprofen use and acetaminophen use may be associated with parallel increases in either asthma exacerbations or symptoms.” By the same token, we also cannot exclude the possibility that both may decrease such outcomes. Uzoigwe and Ali note one common mechanism of action between these medications; however, evidence shows that acetaminophen acts through other mechanisms. ¹–³ Furthermore, the purported link between acetaminophen use and worsening asthma is hypothesized to be caused by acetaminophen metabolism leading to depletion of protective glutathione in the lungs.⁴,⁵ Ibuprofen is not metabolized in this manner. Therefore, we find it unlikely that different mechanisms of action and metabolism between these two medications would have resulted in such similar increases in symptoms as compared with placebo. In the Results section of our article, we reported that “no interaction was detected between asthma-controller therapy and treatment group (P = 0.91),” indicating that there was no differential response in children receiving montelukast.

References


Since publication of their article, the authors report no further potential conflict of interest.