

Josh Klepinger: Block 4 CAT

Acetaminophen versus Ibuprofen in Young Children with Mild Persistent Asthma. Sheehan, W.J., et al. *The New England Journal of Medicine*. August 18, 2016. 375(7): 619-630

Question

Does the use of acetaminophen for pain and fever result in asthma-related complications in children with mild persistent asthma?

Background

Studies have suggested an association between acetaminophen use and asthma-related complications among children, with little data to support this claim.

Methods

A multi-center, prospective, randomized, double-blind trial that enrolled 300 children with mild-persistent asthma was undertaken. Ages ranged from 12 months to 59 months of age. Each group was assigned to receive either acetaminophen or ibuprofen when and if they needed it for fever or pain over the course of 48 weeks. The primary outcome was the number of asthma exacerbations that required treatment with systemic glucocorticoids. Both groups received standard asthma controlled medications as part of a simultaneous trial.

Results

There was no difference in the median number of doses of either acetaminophen vs. ibuprofen that each group used during the trial period (5.5 doses). There were 0.81 asthma exacerbations per patient in the acetaminophen group, and 0.87 in the ibuprofen group.

Bottom Line

The use of acetaminophen on an as-needed basis was not associated with an increased incidence of asthma exacerbations in the children with mild persistent asthma when compared with ibuprofen.
