

NEWS

The association between acetaminophen and asthma - should its pediatric use be banned? A huge epidemiological effort made all over the world to cast some light on the origin of asthma and its recent increase in prevalence has been made. The focus on genetic factors has failed to show a strong signal. Environmental factors have provided some variable signals (from protecting to inducing asthma) on the role of infections, allergens and bacterial substances. The only large and consistent epidemiological signal (apart from tobacco exposure), is previous acetaminophen (paracetamol) exposure, which consistently increases the prevalence and clinical manifestations of every wheezing disorder. Is acetaminophen a real asthma promoter or an innocent bystander?^[1]

RE (VIEWS)

The main mechanism suggested is that acetaminophen may impair respiratory antioxidant defenses by decreasing the amount of reduced glutathione present in the airways, which would increase the airway oxygen radicals with attendant detrimental effects: Tissue injury, smooth muscle contraction, bronchial hyper-responsiveness, increased vascular permeability, release of proinflammatory mediators and impaired β -receptor function.^[2]

Another possible mechanism offered could be related to its antipyretic effect: By reducing fever, acetaminophen may reduce the cytokine storm that takes place as a part of the febrile response, mainly the production of IFN- γ and IL2.^[3]

For the present whatever may be the evidence (for or against), smoke has started to arise as for as the use of paracetamol and association of wheeze, in pediatric cases.

So it is concluded, too liberal use of acetaminophen in children should no longer be recommended since there is a good deal of epidemiological evidence suggesting that acetaminophen exposure increases wheezing disorders prevalence, and while awaiting the results of appropriate randomized clinical trials it seems reasonable to limit acetaminophen exposure to clinical settings where no alternatives (ibuprofen) exist. In wheezing children, using ibuprofen has proved to decrease wheezing morbidity.^[1]

An evolving curse on paracetamol use in children

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News and Views

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