

SNIPPETS FROM OTHER ALLERGY JOURNALS

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The January 2006 edition of the *Journal of Allergy and Clinical Immunology (JACI)* has as its main theme the recent FDA 'black box' warning on drugs used by allergists, especially the long-acting β_2 -agonists (LABA). There are at least seven articles on this matter including reviews, editorials and perspectives. The reader is exposed to the meanings and mechanisms of the black box warning and the functions of the FDA. An understanding of β_2 -receptor function, mechanisms and genetic variability is highlighted. The review summary by Harold S Nelson concludes that LABAs should only be administered accompanied by therapy with inhaled corticosteroids. In this combination there is no evidence of deleterious effects from the use of the LABAs.

The use of magnesium sulfate in acute asthma: rapid uptake of evidence in North American emergency departments

Rowe BH, Camargo CA (*J Allergy Clin Immunol* 2006; **117**: 53-58)

This article reminds us that intravenous magnesium sulphate is a possible treatment modality in patients with acute severe asthma. Observational cohort study data were collated from 9 745 emergency department patients with asthma. Of these patients, 240 received magnesium sulphate. Although there is no comment on the efficacy of this treatment, the authors conclude that physicians in emergency departments across North America and Canada accept the efficacy of this treatment in acute asthma. Further, it is readily available and appropriately restricted to use in patients with severe acute asthma.

Bidirectional interactions between viral respiratory illnesses and cytokine responses in the first year of life

Gern JE, Brooks GD, Meyer P, *et al.* (*J Allergy Clin Immunol* 2006; **117**: 72-78)

A very complex article detailing results of nasopharyngeal viral analysis and blood cytokines from 285 children enrolled in the study. The children were enrolled at birth and routine blood and nasopharyngeal samples collected at predetermined intervals as well as during wheezing episodes. Of clinical interest, 89 children (31%) had 179 wheezing episodes. Viruses were identified in 118 (66%) of these wheezing episodes, most often rhinovirus (n = 59) and RSV (n = 51). Wheezing

episodes were associated with a unique developmental pattern of IL-13 and IFN- γ cytokine response profiles which will continue to be tracked.

Response profiles to fluticasone and montelukast in mild to moderate persistent childhood asthma

Zeiger RS, Szefer SJ, *et al.* (*J Allergy Clin Immunol* 2006; **117**: 45-52).

This large group of asthma researchers from the Childhood Asthma Research and Education Network of the National Heart, Lung and Blood Institute have sought to determine intra-individual and interindividual response profiles to an inhaled corticosteroid (ICS) and a leukotriene receptor antagonist (LTRA).

One hundred and forty four children (6-17 years) with mild to moderate persistent asthma were enrolled. The study was multicentre, randomised, double-masked, 2-sequence, and 16-week crossover. The ICS fluticasone propionate (100 μ g twice daily) or the LTRA montelukast (5-10 mg) were administered using only as-needed bronchodilators.

Clinical, pulmonary, and inflammatory responses to these controllers were evaluated.

The results confirmed that improvements in most clinical asthma control measures occurred with both controllers. However, clinical outcomes, pulmonary responses and inflammatory biomarkers improved significantly more with fluticasone than with montelukast.

Exhaled nitric oxide (eNO) a biomarker for allergic inflammation was also measured. Within participants, patients with higher base-line eNO levels responded better to ICS than LTRA.

The authors concluded that 'asthma control, assessed by use of several clinical, pulmonary and inflammatory responses, improved consistently and significantly more with an ICS than a LTRA in children with mild to moderate persistent asthma, each treated with both controllers'. Further eNO might be a useful marker to identify children who can achieve a greater improvement with an ICS compared with an LTRA.

The *Journal of Allergy and Clinical Immunology* is the official publication of the American Academy of Allergy, Asthma and Immunology. International E-membership (\$25) is available to doctors with these interests. Further details can be obtained at www.aaaai.org, or from this author.

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