

Correspondence

Safety and efficacy of cromolyn sodium and inhaled corticosteroids

To the Editor

The article by Shapiro et al.¹ in the November issue of the JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY is an interesting comparison of cromolyn sodium, a nonsteroidal antiinflammatory drug, versus triamcinolone acetate, an inhaled corticosteroid. The authors conclude that there was no difference in efficacy, a conclusion fully justified by their results; however, they also conclude that the level of small doses of inhaled corticosteroids used in their study are rarely associated with side effects. The only methods of investigating side effects used in their study were morning cortisol and response to cosyntropin. These methods are by no means the most sensitive tests of hypophysopituitary-adrenal axis function. More frequent sampling of plasma cortisol is a more sensitive method.² In fact, with such testing, significant nocturnal and early morning as well as 24-hour cortisol suppression have been shown with doses as small as 400 µg of beclomethasone dipropionate/day.^{3,4}

Growth suppression was generally not shown, whereas inhaled corticosteroids were mostly given to patients with severe asthma.⁵ Severe asthma itself and the repeated use of systemic corticosteroids, often necessary before the introduction of inhaled corticosteroids, both cause growth suppression. Correction of these two factors by inhaled corticosteroids may have masked their own growth suppressive effect, because more recent studies in patients with mild or mild-to-moderate asthma did show significant suppression with daily doses as low as 200 µg of budesonide or 400 µg beclomethasone dipropionate.^{6,7}

In their discussion the authors mention the superiority of betamethasone isovalerate over cromolyn sodium based on four references.⁸⁻¹¹ The reality is that the comparison is not nearly that one-sided. Kuzemko et al.⁸ used cromolyn sodium in a twice daily dosing, an insufficiently documented and in my experience rarely effective dosing schedule. Two other studies^{9,10} enrolled only preselected patients whose cromolyn treatment failed, therefore, severely biasing their results.^{9,10} In fact, Hiller and Milner⁹ concluded in the last sentence of their summary that "the use of corticosteroid aerosols should be confined to those children who fail to respond satisfactorily to disodium cromoglycate."¹¹ I can only agree with their conclusion.

Therefore the conclusion of this otherwise excellent study that inhaled corticosteroids and cromolyn sodium are equally safe is not supported by available data in the literature.

Peter König, MD, PhD
Professor of Child Health
Director, Division Pulmonary/Allergy
University of Missouri-Columbia
School of Medicine
7th Floor N.
Columbia, MO 65212

REFERENCES

1. Shapiro GG, Sharpe M, DeRouen TA, et al. Cromolyn versus triamcinolone acetonide for youngsters with moderate asthma. J ALLERGY CLIN IMMUNOL 1991;88:742-8.
2. Jennings BH, Andersson K-E, Johansson S-Å. Assessment of the systemic effects of inhaled glucocorticosteroids: the influence of blood sampling technique and frequency on plasma cortisol and leucocytes. Eur J Clin Pharmacol 1990;39:127-31.
3. Law CM, Honour JW, Marchant JL, Preece MA, Warner JO. Nocturnal adrenal suppression in asthmatic children taking inhaled beclomethasone dipropionate. Lancet 1986;1:942-4.
4. Tabachnik E, Zadik Z. Diurnal cortisol secretion during therapy with inhaled beclomethasone dipropionate in children with asthma. J Pediatr 1991;118:294-7.
5. König P. Inhaled corticosteroids-their present and future role in the management of asthma. J ALLERGY CLIN IMMUNOL 1988;82:297-306.
6. Wolthers OD, Pedersen S. Growth of asthmatic children during treatment with budesonide: a double-blind trial. BMJ 1990;303:163-5.
7. American Academy of Allergy and Immunology Study Group. Comparison of aerosol beclomethasone and oral theophylline as primary treatment of chronic asthma: III. Adverse events [Abstract]. J ALLERGY CLIN IMMUNOL 1991;87:202.
8. Kuzemko JA, Bedford S, Wilson L, Walker SR. A comparison of betamethasone 17 valerate and sodium cromoglycate in children with reversible airway obstruction. Postgrad Med J 1974;50(suppl 4):53-8.
9. Hiller EJ, Milner AD. Betamethasone 17 valerate aerosol and sodium cromoglycate in severe childhood asthma. Br J Dis Chest 1975;69:103-6.
10. Sarsfield JK, Sugden E. A comparative study of betamethasone valerate aerosol and sodium cromoglycate in children with severe asthma. Practitioner 1977;218:128-32.
11. Ng SH, Dash CH, Savate SJ. Betamethasone 17 valerate compared with sodium cromoglycate in asthmatic children. Postgrad Med J 1977;53:315-20.

Morrow-Brown needles revisited

To the Editor:

Drs. Kavel and Ransom fail to mention a few pertinent details in their letter to the editor published in the July 1992, issue of the JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY (1992;90:141). They previously advised us that "Due to sabotage by a disgruntled employee in England in 1988, a small number of (Morrow-Brown) needles manufactured then may have had an unacceptably high rate of defective points." We think it is *their* responsibility to let *their* customers know of possible defects. It is not our responsibility to let them know, as they suggest. We still have some unopened packages of these Morrow-Brown needles and would be happy to open them in front of an impartial audience. This information is pertinent, inasmuch as skin testing devices like these, *with no lot number*, can easily be

placed on a shelf and used at any time, since there is no expiration date. In their letter they set themselves up as individuals "instrumental" in making the Morrow-Brown needle available to allergists in this country. We have been informed that James Ransom is director and shareholder, president and treasurer of Allergard, Karl Kavel is director and shareholder, and Marsha Kavel is either secretary of the corporation or executive vice president, as she designated in one of the legal documents. We can assure you that we own no stock in any of the companies that market Multi-Test nor do we serve as officers of these companies. Drs. Kavel and Ransom encourage fair-minded physicians

to form their own opinion regarding the Morrow-Brown needles. We would invite everyone else to do the same.

Sheldon L. Spector, MD

Cassandra Mahan, MD

Sheldon Siegel, MD

Roger Katz, MD

Gary Rachelefsky, MD

Allergy Medical Clinic

11645 Wilshire Blvd., Suite 600

Los Angeles, CA 90025

Bound volumes available to subscribers

Bound volumes of THE JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY are available to subscribers (only) for the 1993 issues from the Publisher, at a cost of \$60.00 for domestic, \$82.20 for Canadian, and \$78.00 for international subscribers for Vol. 91 (January-June) and Vol. 92 (July-December). Shipping charges are included. Each bound volume contains a subject and author index, and all advertising is removed. Copies are shipped within 30 days after publication of the last issue in the volume. The binding is durable buckram with the journal name, volume number, and year stamped in gold on the spine. *Payment must accompany all orders.* Contact Mosby-Year Book, Inc., Subscription Services, 11830 Westline Industrial Dr., St. Louis, MO 63146-3318; phone (800) 325-4177, ext. 4351, or (314) 453-4351.

Subscriptions must be in force to qualify. Bound volumes are not available in place of a regular journal subscription.