

Letters to the editor

Withdrawal of the Medihaler- epi[®]/Adrenaline Medihaler[®]: comments of the Subcommittee on Insect Venom Allergy of the EAACI

At the end of October 1997, 3M Health Care, Loughborough, UK, decided to recall all batches of Medihaler-epi[®]/Adrenaline Medihaler[®] from the market worldwide and to discontinue supply. The rationale for this decision related to the inability of the supplier to guarantee the required quality of the product throughout its shelf-life, which had originally been 3 years but had recently been reduced to 18 months. As a result of raised testing standards, even the reduced shelf-life could no longer be guaranteed.

The Medihaler-epi had been the favoured adrenaline preparation for self-medication in many German-speaking and Scandinavian countries and was also distributed in the UK, Australia, and New Zealand. In 1996, the Medihaler-epi had been withdrawn from the German market because of its content of chlorofluorocarbons (CFCs).

Like other adrenaline preparations for self-application, the Medihaler-epi was prescribed by allergists for patients with a history of anaphylaxis, especially from Hymenoptera stings and food (1). The distinct advantages of the Medihaler-epi have been the capacity for repeated use; the rapid effect on respiratory symptoms, especially laryngeal edema and bronchial asthma; and the readiness of the patient to use it, as compared to adrenaline preparations for injection. On the other hand, the systemic effects of inhaled adrenaline were less reliable than those of injected adrenaline, and the preparation could not be used in an unconscious patient (2).

Comments

There is universal agreement that adrenaline is the most potent and fastest-acting medication to treat anaphylaxis (1–5), and should therefore be prescribed for self-medication to all patients with a history of severe anaphylaxis, especially from food and insect stings.

All patients who had a prescription for the Medihaler-epi/Adrenaline Medihaler now need an alternative adrenaline preparation. Some US suppliers offer metered-dose inhalers providing adrenaline for asthma treatment. These may be used as an alternative. However, they have the same difficulties with shelf-life as the Medihaler-epi/Adrenaline Medihaler, and they also use CFCs as propellants. Therefore, as a first-line alternative, we recommend one of the injectable adrenaline preparations for self-application, as recently discussed in our position paper (2). By the criteria of easy applicability and adequate shelf-life, Epipen[®]/Fastject[®] and Anakit[®]/Anaguard[®] are the most suitable choices, Anakit[®]/Anaguard[®] being considerably cheaper. Anahelp[®] is another valuable alternative, but is registered only in France.

Of course, detailed instruction should be given to every patient who receives adrenaline for self-medication. This instruction should include:

- oral and written instruction on how and when to use the preparation (1, 3), as well as on storage and regular monitoring of expiry date and signs of degradation (2)
- repeated practice under the supervision of a doctor or a nurse, preferably with training devices
- the point that after the use of the kit, a doctor must be contacted immediately, independently of the success of its use.

References

1. Müller U, Mosbech H, Blaauw P, et al. Emergency treatment of allergic reactions to Hymenoptera stings. Position paper of Subcommittee on Insect Venom Allergy of EAACI. *Clin Exp Allergy* 1991;21:281–8.
2. Müller U, Mosbech H, Aberer W, et al. Adrenaline for emergency kits. Position paper of Subcommittee on Insect Venom Allergy of EAACI. *Allergy* 1995;50:783–7.

3. AAAI Board of Directors. The use of epinephrine in the treatment of anaphylaxis. *J Allergy Clin Immunol* 1994;95:666-8.
4. Fisher M. Treatment of acute anaphylaxis. *BMJ* 1995;311:731-3.
5. Wyatt R. Anaphylaxis. *Postgrad Med* 1996;100:87-99.

On behalf of the Subcommittee on Insect Venom Allergy:

U. R. MÜLLER
F. BONIFAZI
B. PRZYBILLA
L. YOULTEN

H. MOSBECH
J. FERNANDEZ SANCHEZ
D. VERVLOET

Atopy in twins

In the November 1997 issue of *Allergy*, Lichtenstein & Svartengren reported on a study of 1480 Swedish twin pairs (7-9 years old) in which they examined the importance of genetic and environmental factors in asthma, hay fever, eczema, and urticaria. They concluded that although genetic factors are of major importance in atopic manifestations in children, both environmental and sex-related factors play a role. In 1981, we studied 50 sets of twins (30 monozygotic [MZ] and 20 dizygotic [DZ]), of whom at least one twin had a history of atopy, by means of skin tests and total and specific serum IgE (RAST) determinations. The concordance of atopies for MZ was, at 56.7%, significantly higher than for DZ, at 20%. The mean values of the log serum IgE level differences for the MZ and DZ sets of twins were not statistically significant, but the percentage distribution of the log serum IgE level differences showed a closer correlation of the IgE levels among MZ. The MZ sets did not show a better concordance in the specific reagin

production, as measured by RAST or skin tests, than the DZ sets. These findings seem to indicate that although the tendency to IgE production is genetically determined, its specificity is governed mainly by environmental influences.

References

1. Lichtenstein P, Svartengren M. Genes, environments, and sex: factors of importance in atopic diseases in 7-9-year-old Swedish twins. *Allergy* 1997;52:1079-86.
2. Wüthrich B, Baumann E, Fries RA, Schnyder UW. Total and specific IgE (RAST) in atopic twins. *Clin Allergy* 1981; 11:147-54.
3. Wüthrich B, Wyss S. Atopien bei Zwillingen: IgE- und RAST-Ergebnisse. 2 Kölner RAST-Symposium, Berlin: Grosse Verlag, 1981:S12-21.

B. WÜTHRICH

Allergy Unit, Department of Dermatology, University Hospital, Gloriastrasse 31, CH-8091 Zurich, Switzerland

This document is a scanned copy of a printed document. No warranty is given about the accuracy of the copy. Users should refer to the original published version of the material.