

EDITORIAL

Considerations on third generation antihistamines

For several months now, the term 'third generation of antihistamines' has emerged spontaneously from the medical literature. These attempts at definition, which vary greatly, create confusion both for the health professionals and the lay public. This is of considerable concern for the scientific community involved in allergy, mainly due to the lack of consensus.

One definition refers to the active metabolites of new second generation drugs as the basis for a third one [1,2]. Others are focused on certain specific properties: no electrocardiogram (ECG) effects [3], rapid onset of action [4] or no drug interactions [3].

First generation antihistamines were defined by their H₁ receptor blocking power and despite pronounced unwanted side-effects are still often used mainly in over-the-counter (OTC) products, alone or in combination with other drugs.

The second generation antihistamines are said to be 'non-sedating H₁ blockers' due to the lack of penetration through the blood-brain barrier. Compared to the first generation, they are known for their high potency and minimal central nervous system (CNS) effects.

Numerous compounds have been created responding to their own pharmacokinetics. Some of them undergo extensive metabolism, others do not. Cardiotoxic effects emerged with some second generation antihistamines and most of the new compounds exhibit properties on systems other than H₁ receptors, i.e. anti-inflammatory properties. Certainly, the second generation manifests a great diversity.

Which criteria should drugs have to fulfil to be labelled as third generation antihistamine? This is obviously for the scientific community to answer. To pave the way for the elaboration of a consensual definition and with the support of the British Society for Allergy and Clinical Immunology, a Consensus Group on New Generation Antihistamines (CONGA) has been set up. This Group is led by Professor S. T. Holgate (UK) and includes Professor G. W. Canonica (Italy), Dr G. Scadding (UK), Professor F. Estelle R. Simons (Canada), Professor M. Tharp (USA), Professor H. Timmerman (the Netherlands) and Professor K. Yanai (Japan), so that there will be a multidisciplinary input. This exercise is closely linked to the Southampton Workshop 'Antihistamines: Back to the

Future'[5] and should appear as a necessary sequel after a 4-year evolution of the antihistamine class.

The Consensus Group met for the first time at the University of Leuven (Belgium), June 11–12, 2001, and made clear the necessity to clarify the theme with the help of international experts representing the different fields involved in allergy. Respecting a strictly academic approach, the Consensus Group agreed on the following aims: (a) to review in depth the present status of the term 'third generation antihistamines', (b) to analyse the potential criteria that drugs should fulfil to be labelled as third generation, (c) to find gaps and to bridge them with the back-up of expert networking, and (d) to issue a consensual statement endorsed by the scientific community.

References

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- 3 Walsh GM, Annunziato L, Frossard N et al. New insights into the second generation antihistamines. *Drugs* 2001; 61:207–36.
- 4 Vassileva H, Plovdiv NM. Results of the treatment of children with pollinosis with the new non sedative H₁-blockers. *Allergy* 1995; 50 (Suppl. 26):195.
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