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# Introduction

In recent years there has been debate in different circles on the influence of pollution and climate change upon the planet. Allergology is a medical specialty that has not escaped such debate. The present supplement addresses in depth the influence of environmental pollution upon the individual, and on the production, composition and allergenic capacity of antigenic proteins. There is sufficient scientific evidence to conclude that environmental pollution enhances allergic responses in atopic individuals, and increases the activity and amount of allergens to which such individuals are exposed. Nevertheless, the existing data are still insufficient to attribute the increase in prevalence of respiratory allergic diseases to environmental pollution. On the other hand, there is an association between the levels of pollution and the worsening of such respiratory diseases.

The second part of the supplement addresses different clinical aspects relating to the use of antihistamines. Firstly, an attempt is made to answer the question as to whether it is more effective to treat allergic rhinitis with antihistamines administered on a continuous basis, or depending on the appearance and intensity of the symptoms. Although a number of publications have dealt with this aspect, there is no evidence to indicate which treatment approach is best. The review concludes by stressing the need to conduct studies specifically designed to answer this question, and advocates the individualization of therapy in accordance to the specific characteristics of each patient.

Secondly, an extensive review is provided of the existing data on antihistamine use in pediatric patients. Of note in this context is the scant information available on first-generation antihistamine use in children despite the still

widespread prescription of such drugs. Emphasis is placed on the data allowing us to know the efficacy, dosage and safety of the second-generation antihistamines, and which allow their recommendation for application in pediatric patients. In view of the limited data available, continued research is required of other indications for antihistamine use in pediatric patients, such as seromucosal otitis, atopic dermatitis and the management of asthma.

Lastly, a review is made of the use of these drugs in chronic urticaria, where they represent the first-line symptomatic treatment option (Class 1/A evidence), according to the most recent European consensus diagnostic and treatment guides. Nevertheless, the pharmacokinetic characteristics of these drugs may be important when it comes to selecting the most adequate antihistamine. On the other hand, little is known of the clinical relevance of the antiinflammatory properties which these drugs may have in relation to chronic urticaria. This is one of the most important problems presently facing us in the use of antihistamines for the treatment of this disease. In certain cases, some authors advise the use of doses greater than those recommended by the Summary of Product Characteristics - though there are no well conducted studies to warrant this approach.

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