Growing consensus in asthma?

P. Vermeire*

In this issue of the Journal we are pleased to present to our readers the full publication of the "International Consensus Report on Diagnosis and Management of Asthma" [1]. This document has been prepared by the International Asthma Management Project, set up by the National Heart, Lung and Blood Institute of the USA, National Institutes of Health and ably chaired by Dr AL Sheffer. It assembled eighteen recognized international experts from various countries, including twelve European colleagues with three members of our Editorial Board. The final document was officially released during the Annual Meeting of the American Academy of Allergy and Clinical Immunology in Orlando (Florida) in March 1992.

Bronchial asthma is a disease with quite variable features and natural history, frequently affecting all age groups in the general population. Despite a growing awareness and interest, it remains grossly underdiagnosed and undertreated. Even after correct recognition, there used to be all but consensus on diagnostic assessment and therapeutic management. This was well demonstrated in the mid-eighties by questionnaire surveys carried out among physicians in Europe and the USA [2, 3]; in these, considerable differences in practice were noted between participating specialists in various countries and also between different specialities within countries. This was striking for important issues like the use of inhaled beta-agonists, inhaled steroids and oral theophylline for chronic maintenance therapy, or institution of immunotherapy in allergic asthma. To take only one example, 92% of responding British, but only 32% and 37% of French and American respiratory specialists, respectively, claimed to be using often or always inhaled steroids as first line for chronic maintenance treatment in adults. Corresponding figures for paediatricians of these countries in children were 28, 13 and 4% respectively.

Surveys among patients have confirmed these differences: whereas in a British survey in general practice 35% of 312 adult asthma patients inhaled steroids regularly [4], these drugs were virtually not used by 458 asthma patients in a rural area of France [5]. The highly relevant question whether such striking differences affect outcome parameters like morbidity or mortality has not received an adequate answer, because comparative prospective studies are lacking.

In recent years insights regarding optimal asthma management have changed considerably; there is now a greater emphasis on appropriate anti-inflammatory drug therapy, self-evaluation and self-management with the hope of better prevention of life-threatening events and of long-term deterioration. These changes have led to the publication in rapid succession of guidelines on asthma management in adults and children. For up-to-date chronic maintenance treatment in adults most of the information has already been provided in the publication initiated by the Thoracic Society of Australia and New Zealand in 1989 [6]. An international body of experts with a majority of Canadians met in May 1989 and refined and extended these guidelines [7]. For the management of children a consensus statement has been published [8] and recently revised [9]. More concise British guidelines for adults were issued in 1990 [10]; in an accompanying editorial they were welcomed as 'an excellent first effort' [11]. Finally, the USA National Asthma Education Programme of the National Institutes of Health recently issued very detailed American guidelines in 1991 both for adults and children [12]; they indicated a major change in treatment policies in the USA with a reduction of the role of methylxanthenes and increased emphasis on anti-inflammatory agents.

The present International Consensus Report follows a cascade of published guidelines and consensus statements. It raises two obvious questions:

1) how do such guidelines contribute to improving the overall management of the disease, and
2) does the present report add to those already published since 1989?

A first contribution of these guidelines is a lead to a better questioning and redefinition of the goals of asthma therapy. The objectives have gradually shifted from reversing or preventing airway narrowing [13] to achieving and maintaining control of asthma, and this control has now been clearly defined. The implicit assumption is that reaching the goals of therapy will improve quality of life and prevent progression to irreversible airway obstruction.

Secondly, assessment and gradation of asthma severity has been refined with an increased emphasis on the objective evaluation of airflow by peak expiratory flow rate (PEFR) monitoring. This must lead to a welcome change in habits, since in 1984–5 only 55%, 25% and 12% of British, French and American adult specialists respectively, used PEFR meters frequently (i.e. often

* Department of Respiratory Medicine, University of Antwerp (UIA), Universiteitsplein 1, B-2610 Antwerp, Belgium.
or always) for monitoring their patients, and 60% of American specialists never used them (P. Vermeire, J. Hodgkin, unpublished data). Interestingly, the measurement of bronchial hyperresponsiveness has not been included among the means of assessing severity, nor has a reduction of nonspecific reactivity been stated as a goal of treatment. In individual patients it has not been found to correlate closely with the clinical state of asthma [14].

Linked to the assessment of severity, a systematic stepwise drug treatment approach has been proposed and further refined. Obvious differences are the earlier introduction of inhaled steroids, changed emphasis in the use of inhaled beta-agonists from continuous preventative to p.r.n. (i.e. on demand) treatment, and the reduction of the role of theophylline to an 'accessory' or 'other' bronchodilator. New drugs introduced into clinical practice, like long-acting beta-agonists, will need clear definition of their future place in this 'asthma ladder'.

Finally, detailed action or self-management plans based on correct information and good education of the asthmatic adult or child have been written and tested; early studies indicate that applying them in daily practice will effectively improve patient control and well being [15].

What does the present International Consensus report add to previous reports and guidelines of asthma management? This document is undoubtedly attractive. The project group has succeeded in providing a well-balanced view of present-day asthma management, surely acceptable for most specialists the world over. It refers to previous documents where appropriate, but improves and completes earlier schemes or tables. Although our readers will surely wish to discover more of its merits themselves, I cannot resist drawing their attention to just a few interesting features:
- the presentation of an attractive new operational definition of asthma;
- a more balanced view than in previous documents on specific immunotherapy;
- the appropriate use of a colour code system to guide self-management;
- very detailed but also well-designed figures on assessment of severity and stepwise management, both of the chronic state and of acute exacerbations with a useful adaptation of the Australian Asthma Action Plan Card; and
- an appropriate section on directions for further research into better management.

In the latter section the authors admit having been unable to answer to their full satisfaction a number of critical questions on for example the role of beta-agonists, anticholinergics or theophylline in maintenance treatment, on the long-term (side-)effects of inhaled steroids or on the use of immunotherapy. The exact delimitation of the zones of severity and the steps of management still seems arbitrary and insufficiently based on hard data. We still do not know the effects of aggressive therapy on long-term natural history. Do we really have to push therapy to entirely normal lung function when the patient is asymptomatic?

These areas of ignorance should warn us against being too dogmatic in using these or any other guidelines. As a good cook will not use a recipe book without some common sense [11], a good clinician will likewise need to keep his clinical judgement in designing the best management for his individual asthma patient, and this may deviate from guidelines in a consensus document.

Despite these few critical thoughts, there is no doubt that this elegant document deserves to be widely disseminated and adhered to, before it will need to be updated again. In the months preceding its publication a new worldwide international questionnaire survey on asthma management was performed and the results will be available later this year. Comparison with previous surveys will indicate if international consensus on asthma management is indeed growing. The results will surely also indicate areas or countries where the document needs a more widespread distribution and discussion.

Respiratory specialists will no doubt wish to use the document and refer to it when teaching general practitioners and medical students, or when educating their patients. We trust that the publication of the document in our journal, the ensuing availability of reprints, presumably followed by its translation into different languages, will be of great help in further promoting good asthma management. We are grateful to Dr Claude Lenfant and his staff at the National Institutes of Health, not only for their initiative in assembling the International Asthma Management Project Group, but also for granting permission to print it in our journal.

References