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Introduction

Report of a workshop assessing the risks and benefits of inhaled anti-inflammatory treatment for asthma

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The causes of asthma remain unknown although it is now clear that the underlying pathology of the disease, even in its mildest forms, is one of chronic persistent inflammation. This fact is recognised in many national, and more recently, international guidelines, which recommend that treatment in all but the most mild episodic asthma should be aimed at the underlying pathology rather than at suppression of symptoms: maintenance anti-inflammatory drugs should be introduced when prn β_2-agonist use exceeds three times a week [1]. The guidelines also acknowledge that maintenance use of β_2-agonists is associated with an overall worsening in asthma control. Thus, an increasing requirement for the use of these agents should serve as an indication to start or increase daily inhaled anti-inflammatory therapy.

Adoption of the guidelines means that large numbers of patients not previously treated will receive an anti-inflammatory drug on a chronic basis. The international guidelines recommend three drugs: sodium cromoglycate, nedocromil sodium, and the inhaled corticosteroids, but which drug should be used first is left open to individual choice, apart from a recommendation that all children should begin with a trial of sodium cromoglycate. We suggest that, given equal efficacy in a given situation, safety should be a prime concern, especially in mild asthma and in the more vulnerable age groups — children and the elderly. It is particularly important to consider drug safety in mild-to-moderate asthma since this probably represents the largest group of asthmatic

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patients. In addition, drug safety is relatively more important in mild disease than severe disease, where side-effects can be outweighed by the risk of the disease itself. Thus it is necessary to place a label upon asthma severity in order to assess sensibly the 'risk : benefit ratios' of the three inhaled anti-inflammatory medications. Since the international guidelines made their recommendations primarily on the basis of efficacy, this workshop began by considering the risks.

Sodium cromoglycate remains one of the safest drugs ever developed, which is why an initial trial with this agent is recommended in all children [1,2]. Less experience has been gained with nedocromil sodium, the other inhaled non-steroidal anti-inflammatory agent, but it appears to be following the same tradition of safety as sodium cromoglycate [3]. Side-effects with these drugs appear to be local in nature, the most common being a complaint of a bitter taste with nedocromil sodium. The inhaled corticosteroids are safer than oral corticosteroids but do have measurable local and systemic side-effects. The most common local side-effects of inhaled corticosteroids are those of candidiasis [4] and dysphonia [5]. However, it is the systemic side-effects of these potent drugs which give rise to the greatest concern. These systemic side-effects were reviewed in the papers which follow.

References

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