

Salmeterol/Fluticasone Propionate Combination

A Viewpoint by Peter J. Barnes

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The development of a fixed combination inhaler with a long acting inhaled β_2 -agonist and an inhaled corticosteroid is a logical development in asthma management. A salmeterol/fluticasone propionate combination inhaler has now been launched and is likely to improve asthma care. Several well designed clinical studies have now documented that the addition of a long-acting β_2 -agonist (salmeterol or formoterol) to either low or high doses of inhaled corticosteroids in patients who remain symptomatic provides better control than doubling the dose of inhaled corticosteroid. The reason for this superior effect is still uncertain, but it is likely that the β_2 -agonist is targeting a component of asthma not responsive to corticosteroids, such as abnormal responsiveness of the airway smooth muscle, or release of mediators such as leukotrienes from inflammatory cells. Fixed combination salmeterol/fluticasone propionate is at least as effective as salmeterol and fluticasone propionate given separately, and may even be superior.

The obvious advantage of a fixed combination inhaler is that it will be more convenient for the

patient to use 1 inhaler instead of 2, leading to improved compliance. There are cost savings, as the fixed combination inhaler is cheaper than the 2 given separately, and in countries such as the UK, where there is a fixed charge for each drug separately prescribed, there will be a halving of the expense to the patient. More important advantages are that the fixed combination inhaler prevents the use of the long-acting β_2 -agonist on its own; patients may otherwise discontinue their inhaled corticosteroids when started on the long-acting inhaled β_2 -agonist. A potential disadvantage is the lack of flexibility, but this has been addressed by the availability of 3 dose levels of fluticasone propionate in the fixed combination devices. For mild exacerbations of asthma it is reasonable to double the dose of the fixed salmeterol/fluticasone propionate combination, and for more severe exacerbations to start a course of oral corticosteroids, as currently advised. Clinical trials indicate that there is a marked reduction in asthma exacerbations in patients treated with fixed salmeterol/fluticasone propionate combinations.

The introduction of fixed combinations of salmeterol/fluticasone propionate is an important advance in asthma therapy and it is likely that it will be widely used in general practice and in hospital clinics in adults and children with persistent asthma. ▲