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Beclometasone Dipropionate/ Formoterol in an HFA-Propelled Pressurised Metered-Dose Inhaler

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Combination inhalers of a corticosteroid and a long-acting β_2-agonist (e.g. fluticasone propionate/salmeterol and budesonide/formoterol) are the most effective treatments currently available for the treatment of asthma and are also useful in chronic obstructive pulmonary disease. Many studies have now shown that adding a long-acting inhaled β_2-agonist (LABA) to an inhaled corticosteroid is more effective than increasing the dose of inhaled corticosteroid or the addition of theophylline or a leukotriene antagonist in patients with asthma not controlled with low doses of inhaled corticosteroids.[1] Thus, for patients with moderate to severe persistent asthma, inhaled corticosteroids with a LABA are the preferred treatment, and this allows asthma to be controlled at lower doses of inhaled corticosteroids. In addition, there are positive interactions between the LABA and the corticosteroids whereby they enhance the effects of each other. A fixed combination inhaler is a more convenient way of delivering these drugs and has several other advantages. It is usually less expensive than giving the drugs separately, there is greater adherence than when inhalers are used alone, as the bronchodilator effect of the LABA provides symptom relief,[2] and using the LABA in combination guards against discontinuation of the corticosteroid, which commonly used to occur.

The introduction of a new combination inhaler containing beclomethasone dipropionate (BDP) with formoterol in a metered dose inhaler device is welcomed. As expected, this combination is more effective in controlling asthma than using BDP alone, is well tolerated and appears to give a similar level of control to the existing combination inhalers. BDP was the first inhaled corticosteroid to be used in asthma, but in many countries, fluticasone propionate and budesonide are now preferred as they have less systemic effects at high doses. However, at low doses there are no significant clinical differences between these three corticosteroids; consequently BDP is an appropriate corticosteroid to use in a combination inhaler. Recent studies with budesonide/formoterol have shown that because formoterol provides rapid symptom relief and has flexible dosing, it is possible to use the combination inhaler as a reliever as well as maintenance therapy. This single-inhaler approach provides better asthma control and markedly reduces the number of severe exacerbations.[3] This may be because the dose of inhaled corticosteroid is increased at the time the patient is using the rapid onset of formoterol to relieve symptoms, and thus prevents the exacerbation from evolving. This approach will also be possible with BDP/formoterol, but studies to confirm this have not yet been undertaken. ▲

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