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EDITORIAL

Inhaled corticosteroids in COPD: the EUROSCOP study in perspective

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Smoking cessation remains the only therapy for chronic obstructive pulmonary disease (COPD) which has been conclusively shown to prevent disease progression [1]. Unfortunately, smoking cessation programmes are not yet very successful, so that other therapeutic modalities are worth evaluating. In the USA, the Lung Health Study [2] is currently investigating whether the regular use of inhaled ipratropium bromide will be able to slow down the decrease in forced expiratory volume in one second (FEV_1) over a period of 5 yrs. A recently published Dutch study [3] has cast some doubt on this hypothesis. However, these authors found in 223 patients with chronic obstructive pulmonary disease (COPD) (FEV_1 50–85% predicted) recruited by general practitioners, that the average decline in FEV_1 observed over a 2 yr period was in fact higher in those treated by regular inhalations of salbutamol or ipratropium bromide than in those treated only on demand (82 *vs* 31 $ml \cdot yr^{-1}$). In addition, the number of drop-outs due to increasing signs and symptoms, was twice as high in those treated continuously as in those treated on demand (27 *vs* 13). No difference was observed for the symptoms scores or for the number and duration of exacerbations. At the end of this 2 yr study, a subgroup of COPD patients was selected on the basis of a rapid decline in FEV_1 (>80 $ml \cdot yr^{-1}$) and a high number of exacerbations (>1·yr^{-1}). There were 28 COPD patients (mean age 54 yrs; 16 males; 17 smokers), who received for one more year a daily dose of 800 μg inhaled beclomethasone dipropionate in addition to their bronchodilator [4]. After 6 months, their FEV_1 increased by 0.16 *l*, but a further decline was not avoided at the end of the year of treatment. This study is the first to suggest that long-term inhaled steroids could benefit COPD patients. It must, however, be emphasized that the results can only apply to those experiencing a rapid decline in FEV_1 [5]. In other series, shorter (2–3 month) periods of inhaled steroid treatment have failed to document any improvement either in the degree of airflow limitation or in bronchoconstrictor and bronchodilator responsiveness [6–9].

These failures can be explained by the duration of treatment. However, in their retrospective studies, POSTMA and co-workers [10, 11] found that the beneficial effects of oral steroids on FEV_1 did not manifest before 6–24 months after initiation of therapy.

In contrast with negative studies quoted above, THOMPSON *et al.* [12] recently reported that in smokers with chronic bronchitis, a 6-week course of 1 mg inhaled beclomethasone daily dose (combined with inhaled salbutamol) was able to induce an increase in FEV_1 (10% initial value), a decrease in the bronchitis index assigned during fibreoptic examination of the airways, as well as a decrease in sputum production. One reason for these beneficial results might be that the majority of the subjects had not been treated on a regular basis for their chronic bronchitis.

The present status of long-term therapy of COPD is thus as follows:

1. Smoking cessation remains a major objective, but improved methods to help smokers to quit are mandatory. Under the auspices of the European Respiratory Society (ERS) a study (CEASE) is currently being planned in co-operation with KABI Laboratories, which will investigate whether nicotine patches will significantly increase success rates of smoking cessation.
2. Whether continuous, rather than on-demand, treatment with inhaled bronchodilators is to be recommended is not clear at this stage of our knowledge. A definite answer will come from the on-going Lung Health Study.
3. Preliminary data suggest that a one year treatment with moderately high doses of inhaled steroids might be of benefit to some COPD patients. Whether the benefit will be maintained over the years, and whether this will be true in all COPD patients, is still not known.

These critical questions will be answered by the EUROSCOP study, which is described in this issue of the Journal [13]. As ERS President, I am particularly proud to call the attention of our readers to this important initiative taken by the ERS Assembly on Allergy and Clinical Immunology, headed by R. Pauwels. The EUROSCOP study will be run in close co-operation with Astra Laboratories, and under supervision of a Safety Committee, although with the dose of budesonide to be administered risks are very limited [14].

There is no doubt that the Lung Health Study, EUROSCOP and CEASE, studies initiated by two scientific societies (American Thoracic Society and the

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European Respiratory Society) will yield major insights into a better treatment of our patients suffering from this devastating disease, COPD.

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