that coagulation activity is significantly increased in the left atrium of these patients, even with appropriate anticoagulation therapy. The results also suggest that platelet activity is not increased in the left atrium, and thus antiplatelet drugs may not be an appropriate choice for the prevention of thromboembolism in patients with mitral stenosis.

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BRONCHODILATOR THERAPY WITH OR WITHOUT INHALED CORTICOSTEROID THERAPY FOR OBSTRUCTIVE AIRWAYS DISEASE

To the Editor: I wish to comment on the dose of beclomethasone used by Kerstjens et al. (Nov. 12 issue)* in their study of bronchodilator therapy with and without inhaled corticosteroids for chronic obstructive pulmonary disease (COPD). Readers should be aware that preparations of beclomethasone that are currently available in this country yield 42 pg per puff. The dose used by Kerstjens et al. was 800 μg per day. Thus, a patient would require approximately 20 puffs a day to reach this dose. A 200-puff canister retails for approximately $33. A patient using 20 puffs a day would need three canisters a month, at a cost of approximately $100. It is difficult enough to get a patient to take the standard dose of two puffs four times a day, let alone five puffs four times a day. The problem of compliance with taking this dose of inhaled steroid reflects both the difficulty in inhaling 20 puffs a day and the cost. Readers should be aware, therefore, that they will probably not be able to match the results of the study of Kerstjens et al. A major gap in our drug therapy for asthma and COPD is the unavailability in this country of more potent inhaled steroids that might increase compliance by reducing the need for multiple administrations and that might also reduce costs.

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To the Editor: Therapy with inhaled corticosteroids is efficacious for the amelioration of the symptoms of asthma, but it is unknown whether antiinflammatory therapy will affect the accelerated decline in the forced expiratory volume in one second (FEV1) noted in patients with this disorder. The data of Kerstjens et al. suggest that inhaled corticosteroid therapy may not protect against the accelerated loss of FEV1 in patients with obstructive lung disease. In their study, inhaled bronchodilator therapy alone was compared with inhaled bronchodilator therapy plus inhaled corticosteroid therapy (one group received a beta-agonist alone, another group received a beta-agonist plus an anticholinergic drug, and a third group received a beta-agonist plus a corticosteroid) in adults with bronchial hyperresponsiveness and a decreased FEV1, whose symptom-based diagnoses included asthma, chronic asthmatic bronchitis, and COPD. After three months of treatment, airways hyperresponsiveness was significantly reduced and the FEV1 significantly increased in the group assigned to inhaled corticosteroid, as compared with the other two groups. On the other hand, the authors reported that from month 3 (when the inhaled corticosteroid had a maximal effect on the FEV1) to month 21 (when the trial ended), the FEV1 declined by an average of 64 ml per year in the group receiving a beta-agonist, 19 ml per year in the group receiving a beta-agonist plus an anticholinergic drug, and 33 ml per year in the group receiving a beta-agonist plus a corticosteroid (average for three groups, 39 ml per year). These negative slopes were reported to be not significantly different from one another. A 12-year longitudinal study of 3948 subjects from six U.S. cities found significantly greater losses in the FEV1 in adults with respiratory symptoms as compared with those without symptoms (a negative slope of 41 ml per year among men with symptoms and 32 ml per year among women with symptoms, as compared with the average negative slope of 39 ml per year cited above).

Longer follow-up of larger groups of patients with obstructive airways disease will be required to determine whether inhaled corticosteroid therapy will affect the excess decline in the FEV1 in patients with asthma as compared with subjects without respiratory symptoms.

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The authors reply:

To the Editor: The U.S. Department of Health and Human Services recently issued an international consensus report1 advocating 400 to 750 μg of inhaled corticosteroids as a starting dose for treating asthma, to be increased to 800 to 1000 μg for moderate asthma and even higher for severe asthma under a physician's supervision. We acknowledge the problems associated with administering 800 μg of beclomethasone a day from small-dosage canisters. In Europe, systems delivering 200, 250, and 400 μg of inhaled corticosteroids per puff are readily available, and this probably greatly enhances compliance with taking doses in the ranges mentioned above.

The accelerated decline in lung function in many patients with respiratory symptoms, pointed out by Dr. Hahn, was one of the main targets of our study. This decline leads to early disability and death.2 The improvement in the FEV1,
In their comparison of corticosteroid alone, a corticosteroid plus a nonsteroidal anti-inflammatory drugs (NSAIDs), and an anti-inflammatory agent alone, the authors noted that the NSAIDs and corticosteroids both provided significant pain relief, but the NSAIDs were associated with a higher incidence of gastrointestinal side effects. The corticosteroids were effective in controlling inflammation, but their use was limited by the risk of steroid-induced adrenal suppression. The combination of NSAIDs and corticosteroids offered a balance between efficacy and safety.

To the Editor: The article by Canellos et al. (Nov. 19 issue)1 makes an important contribution to the literature. The authors provide a comprehensive review of the available data and discuss the potential implications for future research. We congratulate the authors on their contribution and look forward to future studies that will further elucidate the role of corticosteroids in the management of rheumatoid arthritis.

Dr. Canellos replies:

To the Editor: Dr. Aisenberg raises an important point about the potential for long-term complications in patients treated with corticosteroids. However, the use of corticosteroids is often necessary to manage the acute exacerbations of rheumatoid arthritis. It is important to balance the benefits of corticosteroid therapy with the potential risks, and to consider alternative treatments where possible. The authors of the article by Canellos et al. provide valuable insights into the current state of corticosteroid therapy and highlight the need for further research to improve patient outcomes.

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