Bronchial Asthma in the Very Elderly

To the Editor:

Bronchial asthma (BA) is not rare in the elderly and causes significant morbidity and mortality.1,2 BA beginning after the age of 50 years is more severe and less reversible than asthma in children.3 We reviewed the clinical features and management of six patients ≥ 80 years old with BA diagnosed in our hospital over the past 10 years (mean age, 87 years; range, 80 to 97 years). Four patients had a history of cardiovascular disease, and one patient had a history of cerebrovascular disease. The bronchodilator inhalation test at ≥ 80 years of age resulted in a 16.0 to 43.2% (mean, 26.9%) increase in FEV1. Five patients received oral β2-agonists, and four patients received oral theophylline. At the time of exacerbation of BA in one patient, theophylline was administered IV and the serum theophylline level was temporarily elevated to the toxic range. This toxicity might be due to the simultaneous administration of oral quinolone antibiotics. Five patients received inhaled steroids; however, in one patient steroid inhaler was not prescribed because of poor adherence to aerosol because of its odor.

We showed that in patients ≥ 80 years old, BA continues to have significant reversibility. The treatment of such patients is further complicated by concomitant disease and pharmacologic interactions, and thus elderly people may not receive optimal treatment for BA.2,3 In the presence of coronary artery diseases, hypoxemia due to asthma and cardiac side effects from β2-agonists and theophylline may amplify the morbidity in elderly patients.1,4 Side effects from excessive β2-agonists and theophylline should be avoided by careful monitoring of symptoms and drug levels in patients at risk of heart disease.5 Additionally, inhaler technique can be a particular problem in elderly patients with BA; however, inhaled steroid is safe and effective, and is indicated especially elderly asthmatics without fear of severe complications. The choice of an appropriate treatment for elderly patients with BA needs careful consideration of the severity of the disease and coexisting diseases, and the level of treatment required.

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REFERENCES
1 Jack CI, Lye M. Asthma in the elderly patients. Gerontology 1996; 42:61–68
3 Reed CE. The natural history of asthma in adults: the problem of irreversibility. J Allergy Clin Immunol 1999; 103:539–547

Erratum

In the April 2002 issue, the article, “Prolonged Endurance Challenge at Moderate Altitude: Effect on Serum Eosinophil Cationic Protein, Eosinophil Dynamics, and Lung Function” (CHEST 2002, 121:1111–1116) by Domej et al contained two errors. On page 1112 (Table 1) and page 1113 (“Results” section), the time of descent (mean ± SD) should be 34 ± 8 min (range, 24–50). In Table 2, the reference range for the eosinophil count should be 150–600 cells/µL.