

Asthma in the elderly: do they need an allergy evaluation?

“The asthmatic pants into old age”—
Sir William Osler

It is estimated that the number of Americans > 65 years of age will increase from 30 million to 50 million over the next 30 years.¹ That means that we will be seeing more patients in that age group. Bronchial asthma in the elderly is receiving increasing attention because the prevalence of this disease is estimated at 7% to 9% in patients older than 70. Up to 40% of patients with asthma are at least 40 years old at the time of their first attack. Whereas many asthmatic patients are evaluated before 40, an equal number have their first episode after 70.² It seems that Osler was only half right. Although many asthmatic patients do continue into old age, a goodly number *begin to pant* at that age.

There is reason to believe that asthma is underdiagnosed in the elderly. A number of reasons account for this, including comorbid conditions, especially congestive heart failure and chronic obstructive pulmonary disease (many asthmatic patients have a history of smoking); a misconception that late-onset asthma is rare; a feeling by the clinician that dyspnea is simply a symptom of aging; a self-limitation of activities by the elderly; and a blunted awareness of bronchoconstriction.³

In this issue of the *Annals*, Huss et al⁴ remind us that not only is asthma in the elderly common, but it also extracts a serious price in terms of quality of life. It also frequently has an allergic basis. During my allergy and immu-

nology fellowship 40 years ago, the conventional wisdom was that asthma over the age of 40 was intrinsic in nature. The proportion of asthmatic patients that are atopic does seem to vary inversely with age; in children, 80%; between 20 to 40 years, 50%; and after 50 years, < 20%.⁵ Although elderly asthmatic patients are indeed less atopic than younger asthmatic patients, elderly patients with asthma have more evidence of atopy than age-matched controls without asthma. Elderly patients with asthma have elevated serum IgE levels as compared with age-matched patients without asthma, and skin tests are more frequent in elderly patients with asthma than in those without.⁵

Huss and colleagues⁴ had no trouble finding 80 asthmatic patients older than 65, of whom two-thirds had moderate or severe persistent disease. Seventy-five percent were skin test-positive to at least one allergen, with the great majority being sensitive to indoor allergens. In addition, there was the finding of high allergen levels in homes. The two ends of the age spectrum seem to have a great deal in common. Indoor allergens are thought to account for much of the increased prevalence of asthma in children.⁷ The same seems to hold true for the elderly.

Along with underdiagnosis, there is evidence that elderly patients are also undertreated. In one recent study,³ only 30% of elderly asthmatic patients received inhaled corticosteroids, with 39% receiving no asthma medications at all. It is encouraging that two-thirds

of the patients in this study were on inhaled steroids, but this is tempered by the fact that 50% used a β_2 -agonist inhaler regularly whether they felt they needed it or not.

The authors point out several potential limitations in their study, including the use of cross-sectional data which precludes evaluation of previous exposures. There is geographical limitation of their patients and because the subjects were recruited from reviewing hospital discharge records, there may be a skewing toward increased severity.

Despite this, I believe this study has great importance to all of us. It points out that the diagnostic index of suspicion for asthma must be high when we deal with the elderly. We must not glibly attribute shortness of breath simply to aging. We also have to keep in mind the distinct possibility of an allergic basis, particularly for moderate and severe persistent asthma in the elderly. We owe these patients a careful history and appropriate skin testing. By identifying clinically significant allergens and then instituting appropriate environmental interventions, we can help make this time in our elderly patient's life truly the golden years.

RAYMOND G. SLAVIN, MD
Professor of Internal Medicine and
Molecular Microbiology &
Immunology
Saint Louis University School of
Medicine
St. Louis, MO

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