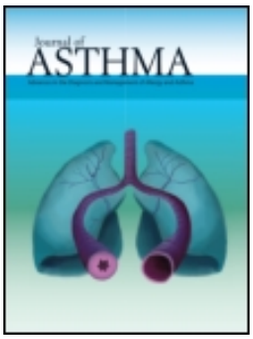

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EDITORIAL

Cough Variant Asthma

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About 5-6% of new cases of asthma in tertiary centers present as chronic cough (1,2). However, the true prevalence in the community is not known. An early paper (1) described this clinical picture as "hidden asthma" because the diagnosis often remains hidden from doctors and patients, sometimes for years, adding to the general problem of underdiagnosis and undertreatment of asthma.

Although in most patients the clinical picture is that of a dry, mostly nocturnal cough, exacerbated by exercise and cold air, some patients have productive sounding cough and in some cases daytime is as bad as nighttime. Frequently, careful questioning reveals a history of dyspnea on exertion (usually not severe enough for the patient to volunteer the information).

Most textbooks define chronic cough as lasting for 3 months or longer. However, a cough lasting even just over 2 weeks, if it is worrisome enough to bring the patient to the doctor's office, should be investigated.

Unless the history and physical reveal other clues, a chest x-ray and pulmonary function testing (including a challenge test) are the most rewarding investigations.

Physical examination is usually not helpful, and in most cases, baseline spirometry is also within the normal range. The diagnosis of asthma can be confirmed either by response to bronchodilator (an increase from baseline of 10% in FVC, 15% FEV_1, or 30% in FEF_{50}), or by a challenge test. A significant bronchodilator response sometimes can be obtained even if the baseline is within the normal range, which is quite wide (e.g., 80-120% for FEV_1). If there is a significant response to bronchodilator (reversible airway obstruction), there is no need for a challenge test.

Exercise or methacholine challenge tests have been used, but the methacholine test has a higher percent of positivity (3).

Treatment with bronchodilators is satisfactory in most cases. Patients not responding to bronchodilators can be treated with cromolyn, although there have been no controlled trials and the evidence is only anecdotal (4,5).

More severe cases might need corticosteroids and a good response has been described by Glauser (6).

In children too young to perform pulmonary function tests, a therapeutic trial can serve as a diagnostic tool. An adequate trial would

be an adrenergic agent plus theophylline for 2 weeks. Unfortunately, all too often a slight suspicion leads to a half-hearted attempt of a single bronchodilator for a few doses, rapidly abandoned.

Even a full two-week therapeutic trial is meaningful only if it is positive; a negative trial does not eliminate the possibility of asthma, cromolyn and corticosteroids might be needed for the final therapeutic trial.

Cough variant asthma probably represents the milder end of the spectrum of patients with asthma. Pratter and associates (7) showed a lower degree of bronchial hyperreactivity in these patients than in a group of patients with the full-blown, wheezing clinical picture.

However, many patients develop wheezing at a later point, probably as a progression of their basic bronchial hyperreactivity.

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