Several studies have shown that nebulized racemic epinephrine, which stimulates both α-adrenergic and β-adrenergic receptors, is as effective or superior to albuterol in relieving airway obstruction in patients with viral bronchiolitis. Some studies have shown no significant difference in the effectiveness of nebulized therapy with epinephrine and albuterol in a hospital setting. But short-term benefits in respiratory rate, oxygen saturation, and clinical score have been observed with the use of epinephrine. A single outpatient, placebo-controlled trial noted a statistically insignificant but potentially clinically meaningful 12% decrease in the hospitalization rate in the epinephrine group. One study in an ED showed that patients treated with epinephrine were discharged significantly earlier than patients who had been treated with albuterol.

There is no standardized outpatient regimen for the management of bronchiolitis. Racemic epinephrine is not the first agent of choice of most ED physicians for the treatment of bronchiolitis. Emergency physicians use nebulized epinephrine as a potential rescue medication for children who are to be admitted to the hospital.

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REFERENCES


Housing and Health Counseling
Design and Environmental Results

To the Editor:

Since 2002, a new service has been available to physicians in southeast France. They may ask for an audit of the indoor environments of their patients when they feel that the environment is having a negative influence on patient health status. A telephone survey was recently designed to evaluate the efficacy of this service.

Between March 2002 and June 2005, 328 such environmental studies have been performed. Each study included a questionnaire, an environmental sampling for mold identification, a mite-allergen evaluation, and, in selected cases, the measurement of indoor volatile organic compounds. From April to September 2005, we performed a telephone interview survey, using a structured questionnaire, to evaluate the results of such studies.

The response rate was 62.5%. The main defects that were pointed out in houses were mold infestation (44%), house-dust mite contamination (32%), and volatile organic compound exposure (9%) from new furniture, work being performed, and hobbies. Masonry work, mold decontamination, and plumbing had been performed in 59.4% of those houses. With guidance provided to the participating families, the total compliance rate was estimated to be 50%, the partial compliance rate was 20%, and the noncompliance rate was 30%. Noncompliance was linked to moving, and to time and money constraints. The overall efficacy of the service was evaluated to be total by 3% of families, almost total by 31% of families, partial by 56% of families, and null by 10% of families.

In conclusion, such a service seems to be useful to families. It needs a more objective evaluation and also a cost-benefit analysis. In the literature, the evaluation of the effects of environmental interventions on housing conditions has so far focused on mite-avoidance programs. It has been demonstrated that environmental counseling leads to more advice being given to the family, to the family being more compliant with the advice, and finally to a larger decrease in mite-allergen levels compared to patients who had been advised by an allergist during an outpatient visit. An American intervention study involving especially trained high school graduates has demonstrated a clinical benefit in a large group of mite-allergic asthmatic children.

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REFERENCES