exercise and postexercise spirometry with the addition of oxygen uptake, carbon dioxide production, continuous oximetry, and electrocardiogram monitoring during most tests. EIA was diagnosed if treadmill exercise resulted in reproduction of symptoms in association with a decrease in forced expiratory volume in 1 second of at least 15%. Endoscopy was performed if stridor and/or decreased maximal inspiratory flow were present. Criteria were established for restrictive abnormalities, physical conditioning, exercise-induced hyperventilation, and normal physiologic limitation.

RESULTS. EID was present in the subjects for an average of 30.2 months (range: <1 to 192 months) before evaluation, and in 98 patients the symptoms were attributed to asthma. Symptoms of EID were reproduced during exercise testing in 117 patients. EIA was identified as the cause of EID in only 11 of the 117. Seventy-four demonstrated only normal physiologic exercise limitation; 48 of the 74 had normal-to-high cardiovascular conditioning, and 26 had poor conditioning. Other diagnoses for reproducible EID included restrictive abnormalities in 15, vocal cord dysfunction in 13, laryngomalacia in 2, primary hyperventilation in 1, and supraventricular tachycardia in 1.

CONCLUSIONS. The diagnoses of EIA should be questioned as the etiology of EID in children and adolescents who do not have other symptoms of asthma and who do not respond to pretreatment with a \( \beta_2 \) agonist.

REVIEWER COMMENTS. Although asthma is the most common cause of EID, this article demonstrates the important point that not all EID is caused by asthma. Patients who experience EID but not other signs or symptoms of asthma or who do not benefit from pretreatment with an inhaled \( \beta_2 \) agonist clearly can benefit from a treadmill test with cardiac and respiratory physiologic monitoring. A large portion of these patients demonstrated normal physiologic limitation associated with reproduction of symptoms. Routine treatment of EID as asthma can lead to both unnecessary medication and frustration on the part of the patients and their families.

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Predictors of Primary Care Follow-up After a Pediatric Emergency Visit for Asthma

PURPOSE OF THE STUDY. To identify predictors associated with primary care pediatrician (PCP) follow-up in children evaluated for acute asthma in a pediatric emergency department (ED).

STUDY POPULATION. Parents of children aged 2 to 18 years being discharged after asthma treatment in a pediatric ED.

METHODS. Parents were surveyed by coordinators and described their child’s asthma history and perceived benefits and barriers to making a PCP follow-up visit. Bivariate tests and multivariable logistic regression were used to determine association with completion of a follow-up visit within 4 weeks of the ED visit.

RESULTS. A total of 278 subjects \( (n = 278) \) were enrolled; 55% saw their PCP within 4 weeks of the ED visit. Baseline factors that were associated with an increased likelihood of follow-up included a recent hospitalization, >1 ED visit for asthma in the past year, the parent’s assessment that the child had “very severe” asthma, and current daily use of a controller medication. Parental beliefs that taking daily asthma medications and finding out about the causes of asthma attacks were also associated with increased PCP follow-up rate. Parents were less likely to follow-up if they reported a lack of convenient appointments or prolonged waits in the PCP office. A multivariable model including clinical factors, parental beliefs, and the study intervention predicted the likelihood of follow-up.

CONCLUSIONS. Parental beliefs about asthma severity, the benefits of controlling asthma, and organizational barriers to seeing a PCP were associated with follow-up after a pediatric ED visit for asthma.

REVIEWER COMMENTS. Many children receive their first and subsequent follow-up visits for acute asthma attacks in the ED. Unfortunately, this is an inefficient and cost-prohibitive method of managing asthma. This study attempted to identify parental perceptions of their child’s disease and the barriers to proper follow-up. These issues are paramount for the pediatrician caring for these children. Addressing parental concerns and removing barriers to follow-up can improve asthma control and allow for more cost-effective management and proper utilization of health care resources. Both the acute treating physician and practicing pediatrician can influence the possibility of appropriate follow-up and care.

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Use of Asthma Guidelines by Primary Care Providers to Reduce Hospitalizations and Emergency Department Visits in Poor, Minority, Urban Children

PURPOSE OF THE STUDY. To determine if a standardized citywide asthma management program delivered by pri-
Predictors of Primary Care Follow-up After a Pediatric Emergency Visit for Asthma
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