of life. In evaluating chronic cough in children, providers should base management on cough characteristics and clinical history, avoid or limit the time frame for empirical trials, and obtain a chest radiograph and spirometry (preand post- $\beta 2$ agonist) when appropriate. There are insufficient data to recommend the testing for airway hyperresponsiveness in all children with chronic cough and moderate-quality data to support AHR when spirometry is normal and asthma is suspected or symptoms are present.

REVIEWER COMMENTS. The evidence base supporting the 2006 CHEST Cough Guidelines approach has grown in the past decade. Protocolized approaches to managing pediatric chronic cough significantly improve clinical outcomes. In summary, it is important for providers to obtain a thorough history in children with chronic cough and then obtain a chest radiograph for all children and spirometry only for children ages ≥ 6 years. Other tests should not be routinely performed unless otherwise clinically indicated. In the meantime, we await more trials for data on some of the new recommendations that are consensus as opposed to evidence-based, particularly in primary care.

URL: www.pediatrics.org/cgi/doi/10.1542/peds.2017-2475RRR

Lye Ching Wong, MD Melinda M. Rathkopf, MD Anchorage, AK

Effects of Childhood Asthma on the Development of Obesity Among School-Aged Children

Chen Z, Salam MT, Alderete TL, et al. *Am J Respir Crit Care Med.* 2017;195(9):1181–1188

PURPOSE OF THE STUDY. To determine what effect asthma has on the development of obesity.

STUDY POPULATION. A total of 3474 children from 8 different southern California communities were enrolled and followed prospectively. A total of 2706 of these children were nonobese at study entry and were included in the primary analysis.

METHODS. Nonobese children were followed and examined annually or biannually from kindergarten or first grade through high school. Questionnaires were completed periodically by parents until study year 5, then by the children until completion of the study. Children were classified as having asthma if they reported being diagnosed with asthma by a physician.

RESULTS. Children with asthma at baseline were 51% more likely to develop obesity than children without asthma (HR, 1.51; 95% CI, 1.08–2.10), even when controlling for multiple variables. However, new-onset asthma during the study was not found to be associated with increased risk of obesity (HR, 0.90; 95% CI, 0.52– 1.55). The use of asthma rescue mediations at baseline was associated with a reduced risk of obesity (HR, 0.57; 95% CI, 0.33–0.96). Conversely, the use of any controller medications was not associated with incidence of obesity (inhaled corticosteroid: HR, 0.97; 95% CI, 0.49–1.93) (nonsteroid controller: HR, 1.34; 95% CI, 0.35–4.97).

CONCLUSIONS. Asthmatic children may be at increased risk of developing obesity. The use of asthma rescue medications may be helpful in reducing that risk.

REVIEWER COMMENTS. There are multiple studies that have suggested that obese children are more likely to have asthma and severe asthma symptoms. However, it is unclear whether children with asthma are at higher risk for obesity. This prospective study followed nonobese children for up to 10 years and found a higher incidence of obesity in asthmatics compared with nonasthmatics. This risk was found to be maintained even when controlling for physical activity level. The authors do acknowledge that details collected regarding physical activity were limited. A better understanding of the interplay between asthma and obesity as well as early identification and management of asthma and obesity risk may be helpful in reducing morbidity.

URL: www.pediatrics.org/cgi/doi/10.1542/peds.2017-2475SSS

Justin M. Skripak, MD Oradell, NJ

Perceived Exercise Limitations in Asthma: The Role of Disease Severity, Overweight, and Physical Activity in Children

Westergren T, Berntsen S, Lødrup Carlsen KC, et al. *Pediatr Allergy Immunol.* 2017;28(1):86–92

PURPOSE OF THE STUDY. To determine if perceived exercise limitation (EL) in asthmatic children was associated with lung function, demographic factors, and/or other medical comorbidities.

STUDY POPULATION. The study included 302 Norwegian children (64% male) with asthma from the Environment and Childhood Asthma birth cohort, evaluated at their 10-year follow-up.

METHODS. The 302 children selected from the cohort had no respiratory infection in the preceding 4 weeks and met 2 of 3 criteria for asthma: symptoms consistent with asthma, a physician's diagnosis of asthma, or use of asthma medications. These subjects underwent evaluation of exercise-induced bronchospasm (EIB, assessed by FEV_1 pre- and postexercise), bronchial hyperresponsiveness (BHR, assessed by methacholine challenge), a structured interview composed of demographic information and perceived exercise limitations, anthropometric data, and calculation of an

Effects of Childhood Asthma on the Development of Obesity Among School-Aged Children Justin M. Skripak *Pediatrics* 2017;140;S213 DOI: 10.1542/peds.2017-2475SSS

Updated Information & Services	including high resolution figures, can be found at: http://pediatrics.aappublications.org/content/140/Supplement_3/S213 .1
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: http://www.aappublications.org/site/misc/Permissions.xhtml
Reprints	Information about ordering reprints can be found online: http://www.aappublications.org/site/misc/reprints.xhtml

٦



PEDIATRACES®

Effects of Childhood Asthma on the Development of Obesity Among School-Aged Children Justin M. Skripak *Pediatrics* 2017;140;S213 DOI: 10.1542/peds.2017-2475SSS

The online version of this article, along with updated information and services, is located on the World Wide Web at: http://pediatrics.aappublications.org/content/140/Supplement_3/S213.1

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2017 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 1073-0397.



Downloaded from www.aappublications.org/news by guest on September 22, 2019