The term “asthma” was first used by Hippocrates in 460 BC to describe panting and respiratory distress. Hippocrates is also credited with describing the relationship between the environment and respiratory symptoms/disease. However, the first descriptions of noisy breathing or wheezing were recorded in ancient China (2600 BC), which associated “noisy breathing” with respiratory distress. Over time, history has recorded asthma not only as a clinical entity, but as a description of a variety of treatments. Alexander the Great, according to ancient Greek history, smoked stramonium, an anticholinergic agent to relax the lungs. Ephedra was used in Roman times mixed in red wine to treat pollen-induced respiratory symptoms. Further along, Aretaeus of Cappadocia, a Greek physician, promoted drinking wine containing owl’s blood as a remedy for asthma. Chicken soup, sleep, and fluids were noted remedies prescribed by Maimonides in the 12th century AD. Tobacco was once touted as a treatment for asthma as it caused cough and sputum expectoration (1500s AD). In the 18th century, Sir William Osler recognized that asthma was due to spasms of the bronchioles along with edema, described the onset in children, and noted that asthma ran in families although he focused on asthma as a psychogenic disease.

Moving to the 19th and 20th centuries, asthma in its many forms was recognized and better management tools were created. Beta2-agonists have been used since the beginning of the 20th century with the introduction of specific medications to address inflammation (inhaled corticosteroids) in the latter part of the century. Now in the 21st century we have seen the development of biologics (pharmaceutical medications) to address elevated levels of markers of inflammation with specific goals of improving the lives of people with asthma.

Currently, asthma is recognized as an inflammatory disease with many phenotypes that require ongoing treatment strategies. National and international asthma guidelines have been developed to help practitioners navigate this complex disease and provide best practices when managing their patients. However, bringing this information to frontline physicians and other health care providers has remained challenging; hence, the need for more studies and reviews.

This issue of Pediatric Annals addresses issues common to pediatricians who take care of children with asthma. The first article, “Asthma in Children: A Brief Review for Primary Care Providers,” by Drs. Heather E. Hoch, Paul R. Houin, and Paul C. Stillwell presents the “nuts and bolts” of asthma management in children. From relevant history to consider, diagnostic tools, and overall management strategies, this article provides a comprehensive review of pediatric asthma.

In the second article, “Persistent Wheeze in Infants: A Guide for General Pediatricians,” Drs. Yolanda Yu, Charles R. Esther, Jr., Clement L. Ren, and Ceila Loughlin outline the challenges of the wheezing infant and how one should approach the dilemma of appropriate management of this cohort of patients. Some children present with chronic cough which may, or may not, be asthma. Therefore, in the next article, “Contemplating Chronic Cough in Children,” Drs. Zara Arain and Oren Lakser outline chronic cough in children and when to consider asthma in this patient population; the authors also provide an alternate diagnosis for cough. Children who have dyspnea on exertion or with exercise may have asthma but may have other etiologies as well. The challenge in this group of children as noted in the fourth article, “Exercise-Induced Dyspnea in Children and Adolescents: Differential
Diagnosis,” by Drs. Rajeev Bhatia, Mutasim Abu-Hasan, and Miles Weinberger is recognizing when there is an underlying disorder such as asthma or whether the child has reached his or her personal physiologic limitation during exercise.

Finally, asthma management is not without controversies. In the final article, “Controversies in Pediatric Asthma,” Drs. Tregony Simoneau and Michelle M. Cloutier review some of these issues such as written asthma action plans, the use of school nurses, the need (or not) of spirometry and peak flow meters, and the use of long-acting beta2-agonists in pediatric asthma care.

These articles are a sampling of knowledge in an expanding field of pediatric asthma. If we were to provide a thorough review of asthma, we would need multiple issues of this journal. The best advice we can give: if you think this is asthma, it probably is. But if your treatment plan does not work, seek out a pediatric pulmonologist (or asthma specialist) for further advice.

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