Aggressive Asthma Management: The Standard of Care

In response to the alarming increase in the prevalence and cost of asthma, an expert panel was convened in 1991 by the National Heart, Lung and Blood Institute (NHLBI) to develop the first consensus guidelines for the care of asthma patients; the most recent update was published in 2007. In 1993, the NHLBI partnered with the World Health Organization to form the Global Initiative on Asthma (GINA) to outline a global strategy for managing and preventing asthma. GINA guidelines were updated in 2019.

To supplement these guidelines, in 2017 allergists and other specialists developed the Asthma Yardstick, a practical tool that helps health care professionals understand how to identify when adults and children with asthma need to step-up their treatments and what the process might involve. In 2018 they issued the Pediatric Asthma Yardstick to address differences in step-up therapy for children in different age groups. In 2019, the Asthma Controller Step-down Yardstick was published to provide clinicians with a practical and clinically relevant framework to determine when and how to implement a step-down in therapy.

- Current guidelines stipulate that asthma should be diagnosed as early as possible and treated aggressively while it is still mild. Otherwise it may worsen, requiring even more expensive medical interventions and, in some cases, cause permanent scarring and irreversible remodeling of the lungs’ airways.
- Asthma cannot be cured, but it can be controlled. When guidelines are followed, people with asthma should expect:
  - No or few asthma symptoms, even at night or after exercise.
  - Prevention of all or most asthma exacerbations.
  - Participation in all activities, including exercise.
  - No emergency room visits or hospital stays.
  - Less need for quick-relief medicines.
  - No or few side effects from asthma medicines.
- The aggressive therapy recommended by GINA and NHLBI Guidelines also includes ongoing and frequent assessment by medical personnel to monitor the disease, develop written treatment plans, adjust therapy as needed and provide education and support services.
- Studies show significant long-term health benefits and cost savings outweigh the initial costs of the aggressive therapy recommended by guidelines.
- Compliance with guidelines remains poor. Too often asthma patients receive health care services from providers who have little specialized training or knowledge of recent advances in asthma disease management and many outdated approaches to asthma treatment are still practiced. As a result, most patients continue to receive substandard care.
- Asthma care is needlessly costly and an estimated 80% of all resources expended for asthma treatment are spent on 20% of patients whose disease is not controlled.
- With their years of specialty training and clinical experience in asthma management, allergists are more likely to follow guidelines and state-of-the-art treatment plans that improve outcomes and reduce costs.
GINA guidelines recommend referral to a specialist for:
- Difficulty in confirming the diagnosis of asthma.
- Suspected occupational asthma.
- Persistent uncontrolled asthma or frequent exacerbations.
- Any risk factor for asthma-related death.
- Evidence of, or risk of, significant treatment side effects.
- Symptoms suggesting complications or subtypes of asthma.

For children ages 6 – 11:
- Doubts about the diagnosis of asthma (e.g., symptoms are not responding well to treatment).
- Symptoms or exacerbations remain uncontrolled despite moderate dose inhaled corticosteroid with correct inhaler technique and good adherence.
- Suspected side effects of treatment, such as growth delay.
- Asthma combined with confirmed food allergy in children.

NHLBI Guidelines recommend referral to a specialist for patients who:
- Have asthma symptoms every day and often at night that cause them to limit their activities.
- Have had a life-threatening asthma exacerbation.
- Do not meet the goals of asthma treatment after three to six months, or their doctor believes they are not responding to current treatment.
- Have symptoms that are unusual or hard to diagnose.
- Have co-existing conditions such as severe allergic rhinitis (hay fever) or sinusitis that complicate asthma or its diagnosis.
- Need more tests to find out more about their asthma and the causes of symptoms.
- Need more help and instruction on treatment plans, medicines or asthma triggers.
- Are being considered for allergy shots, or immunotherapy, which also can be administered orally.
- Need oral corticosteroid therapy or high-dose inhaled corticosteroids.
- Have taken oral corticosteroids more than twice in one year.
- Have been admitted to a hospital because of asthma.
- Need to identify asthma triggers.
- Require confirmation of occupational or environmental substances that may be provoking or contributing to asthma.

An asthma specialist also is recommended for children ages 0-4 who have asthma symptoms every day and three to four nights or more a month. Seeing a specialist also should be considered for older children who have symptoms three days or more a week and one to two nights a month.

Allergy immunotherapy is recommended for people with allergic asthma who:
- Have symptoms that are not adequately relieved by asthma medications.
- Are unable to avoid the allergens that trigger their disease.
- Have unacceptable side effects from asthma medications.
- Have not responded well to asthma medications, or need to avoid long-term medication use.
- In some cases, immunotherapy also can prevent children with nasal allergies or other risk factors from developing asthma.

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