

Louisiana Pharmacists Association

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FOR IMMEDIATE RELEASE

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Louisiana Pharmacists Association Educates Patients about Asthma

According to the World Health Organization, an estimated 235 million people have asthma, and up to 345,000 die from the disease each year. Asthma is the most common chronic childhood disease. Although there are medications to control it, failure to either use them appropriately or adhere to the treatment can lead to death.⁽⁶⁾

What is asthma?

Asthma is a chronic inflammatory disease that leads to the narrowing of the air passages in the lungs. The main characteristics of asthma are airway obstruction, inflammation and irritability. Asthma is thought to be caused by a combination of genetic and environmental factors. In most patients with asthma, the airways are extremely sensitive and can overreact due to certain triggers.^(1,2,4) An asthma trigger is anything which leads to coughing, wheezing, or difficulty breathing. Some asthma triggers include: smoke, allergens, animals, pests, mold, exercise, and conditions such as acid reflux or respiratory infections. Inhaling a trigger causes a reaction that activates cells expressing certain types of antibodies. These antibodies in turn cause pro-inflammatory chemicals to be released that stimulate the contraction of the airway muscles and the secretion of mucus.^(1,4) A late-phase inflammatory response caused by other chemicals then occurs 6 to 9 hours after trigger exposure. This response worsens symptoms.⁽⁴⁾ Asthma is categorized into types including; allergic asthma, exercise-induced asthma, cough-variant asthma, occupational asthma, and nocturnal asthma.⁽³⁾

What are the signs of chronic vs. acute asthma?

Chronic asthma symptoms vary but many patients experience episodic shortness of breath, wheezing, chest tightening, or hacking cough. Patients with chronic asthma may experience a variety of symptoms daily or intermittently depending on the severity of the disease.^(1,4)

An acute asthmatic attack presents as difficulty in breathing, chest tightness, and a burning sensation in the lungs. Patients may be anxious and unable to speak more than a few words with each breath. Other signs include wheezing, a hacking cough, increased heart rate, increased respiratory rate, hyper-inflated chest, labored breathing and blue or pale skin due to decreased oxygen.^(1,4)

What medications are used for asthma?

Inhaled corticosteroids are the first choice for long-term control of asthma. Corticosteroids decrease airway inflammation and reduce swelling and mucus production.^(4,5) They make airways less sensitive to asthma triggers. Combination inhalers of a corticosteroid and a long-acting beta-agonist (also known as LABA) are helpful in controlling more recalcitrant asthma.⁽⁵⁾

Leukotriene antagonists, are typically used in addition to an inhaled corticosteroid. These are oral medications that work by blocking the chemical that causes the narrowing of the airways.^(4,5) Omalizumab is an injection that prevents the body from reacting to asthma triggers, it is intended for patients with allergic asthma who do not respond to corticosteroids.⁽⁴⁾

Fast acting medications are used for an asthmatic flare-up or to preempt exercise-induced asthma.^(4,5) These drugs, like albuterol, cause smooth muscle relaxation and dilation of the airways. These medications are not good for long-term control of asthma. Frequent use of these drugs indicates a need for long-term therapy to help control your symptoms.⁽⁴⁾

When taking an inhaled medication, talk to a pharmacist or doctor about how to use the inhaler and practice using it to properly distribute the medication. Successful asthma treatment requires the patient to take an active role in managing their disease. It is important for patients to talk to their pharmacist or doctor to develop an asthma action plan.^(1,5)

Resources

1. American Academy of Allergy, Asthma & Immunology. Asthma Overview. AAAAI. Published 2014. <http://www.aaaai.org/conditions-and-treatments/asthma.aspx>. Accessed January 15, 2014.
2. American Lung Association. Learning More About Asthma. American Lung Association. Published 2014. <http://www.lung.org/lung-disease/asthma/learning-more-about-asthma>. Accessed January 15, 2014.
3. Bhargava, Hansa. Types of Asthma. WebMD. Reviewed in 2012. <http://www.webmd.com/asthma/guide/types-asthma>. Accessed January 15, 2014.
4. Hill, Angela Massey, Slattum, Patricia W., Swerdlow, Russell H. Asthma. In: Schwinghammer, Terry. ed. *Pharmacotherapy Handbook*. New York: McGraw-Hill; 2009:67.
5. National Heart, Lung, and Blood Institute. How Is Asthma Treated and Controlled? National Institutes of Health. Published June 15, 2012. <http://www.nhlbi.nih.gov/health/health-topics/topics/asthma/treatment.html>. Accessed January 15, 2014.
6. World Health Organization. Asthma Factsheet. World Health Organization. Published May 2011. <http://web.archive.org/web/20110629035454/http://www.who.int/mediacentre/factsheets/fs307/en/>. Accessed January 15, 2014.

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The Louisiana Pharmacists Association, established in 1882, strives to promote the interests of all pharmacists of the State of Louisiana. For more information about the LPA and its benefits, contact Julie Fuselier or Phyllis Perron, LPA Co-Executive Directors at 225/346-6883 or visit our website at www.louisianapharmacists.com.

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