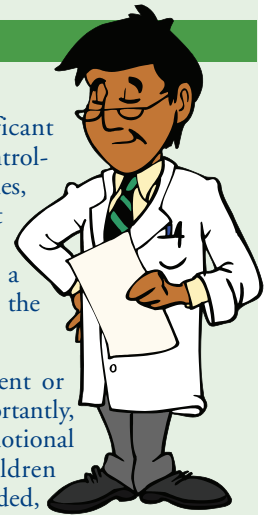


## Eczema: The Need for Adequate Treatment

Winter 2007

By Anne Munoz-Furlong, Founder and CEO of Food Allergy & Anaphylaxis Network (FAAN)



Eczema is an itchy, non-contagious, skin rash caused by a number of irritants. Atopic dermatitis (AD) is a common form of eczema which typically begins in early infancy, it is caused by inflammation of the skin and the skin's inability to retain adequate moisture. It is estimated that as much as 20% or 1 in 5 American children have AD.

The disease is characterized by extreme itching and a recurrent rash that often weeps and crusts. Left untreated, it can become a scaly rash. The distribution of the rash usually varies with the age of the patient. For infants, the rash often appears on the cheeks, forehead, or scalp. In children it is often found at the bend of the elbow joint, behind the knees, and behind the ears. Adolescents and young adults typically have the rash in the same location as children, as well as on the hands and feet.

Eczema can be caused by an allergy. The tendency to develop allergy is inherited. Children are 25% more likely to develop some form of allergy, including eczema, if one parent has allergies. The likelihood increases to 50% if both parents have allergies.

Infants with eczema are at greater risk for having a food allergy (such as milk, eggs, and peanuts) as opposed to children without eczema. These children are also at a higher risk of developing asthma and allergic rhinitis. Finally, studies have shown that exposure to environmental allergens such as pets, dust mites, and pollen increases the risk factors for AD. Continued exposure to these allergens can increase the severity of the symptoms.

### Treatment

Eczema can be controlled with consistent skin-hydrating treatment and avoidance of triggers such as stress, allergens, and irritants (i.e., wool, dry skin, low humidity, heat, sweating, or skin infections) that cause the rash to flare.

Medications are used to control symptoms and infections. Antihistamines are often used to treat the itching, and topical corticosteroids help prevent skin inflammation. Antibiotics are sometimes used to treat skin infections. Non-steroidal anti-inflammatory medications may also be prescribed.

### Why Treatment Is So Important

Left untreated, eczema may cause significant problems. The intense itching and uncontrollable scratching may interrupt sleep. At times, the itching can be so overwhelming, that children will scratch until they bleed. The scratching can also lead to skin infection, a scaly rash, and cause permanent changes to the skin, making thick, leathery patches.

Adequate treatment for eczema can prevent or relieve the physical symptoms. More importantly, perhaps, proper treatment relieves the emotional and social challenges patients face. Children with eczema are sometimes ignored, avoided, or singled out by others who believe the rash is contagious. These experiences can lead to lowered self-esteem and sense of self-worth, which can have long-term impact.

Research has shown that individuals with eczema who are educated about avoiding triggers and proper treatment experienced less scratching and improved quality of life from following their avoidance and treatment plan.

### Seven steps to managing eczema or atopic dermatitis:

1. Identify and avoid triggers
2. Follow your doctor's recommendations for treatment in order to prevent an outbreak
3. Soak in a bath with products such as Aveeno® or Domeboro® to help relieve burning and itching
4. Keep the skin hydrated with ointments such as Aquaphor®, Vaseline®, or Vanicream®, especially after bathing
5. Avoid lotions (which usually contain alcohol that can dry out the skin), perfumed detergents, soaps, and powders, as well as bubble baths
6. Recognize when a rash has become infected and quickly use medicines provided by your doctor
7. Seek education and support from AD patient education organizations, such as:

**The National Eczema Association for Science and Education**  
(800) 818-7546 [www.nationaleczema.org](http://www.nationaleczema.org)

**The Inflammatory Skin Disease Institute**  
(757) 223-0795 [www.isdionline.org](http://www.isdionline.org)

**The Food Allergy & Anaphylaxis Network**  
(800) 929-4040 [www.foodallergy.org](http://www.foodallergy.org)

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## Mild to moderate asthma may affect lung growth in children



Mild to moderate asthma affects lung growth, producing airway obstruction that increases in magnitude from age five to 18 years, according to a new study in the November 2006 issue of the *Journal of Allergy and Clinical Immunology (JACI)*.

Robert C. Strunk, MD, FAAAAI, and colleagues aimed to show the impact of mild to moderate childhood asthma on lung growth. They found:

- Asthma may predispose to significant lung disease in early childhood and potentially lead to development of Chronic Obstructive Pulmonary Disease (COPD) later in life.
- Forced vital capacity for both sexes at age 5 years is higher for CAMP compared with children without asthma, and became increasingly larger than the children with out asthma after age 6 years.

These findings suggest that mild to moderate asthma results in a pattern of airway obstruction that increases in magnitude from age 5 to 18 years and periodic spirometry is needed to monitor children with asthma for signs of increasing airway obstruction with appropriate intervention following national guidelines.



## Methods for asthma management are independently associated with better long-term control



Effective asthma management strategies, especially regular use of inhaled corticosteroids, long-acting beta-agonists and asthma specialist care, are independently associated with better long-term asthma control. These findings are featured in the November 2006 *Journal of Allergy & Clinical Immunology (JACI)*.

Asthma cannot be currently cured and therefore, the goal of asthma therapy is control. Michael Schatz, MD, MS, FAAAAI, and colleagues attempted to identify independent prospective determinants of long-term asthma control.

The study found:

- A significant improvement in long-term control with increasing number of asthma management strategies, even after adjusting for the other predictors of long-term control.
- Long-term asthma control was significantly and inversely related to all severity-related asthma use measures tested.
- Long-term control was significantly and directly related to all management characteristics.
- Long-term control was significantly and inversely related to smoking and COPD but not to reflux.
- Poor long-term control was significantly related to younger age, lower educational level and being African American or male, but not income level.

They found that long-term asthma control is inversely related to asthma severity. Also effective management strategies are independently associated with better long-term control. This data could be used to improve long-term asthma control among the many asthma sufferers in the world.

## Smoking Cessation

By Richard W. Honsinger, MD, MACP, FAAAAI



Tobacco use continues to be the leading preventative cause of death and illness in the United States. Smoking is not as socially acceptable as it used to be. Smokers are having difficulty finding smoking areas on public transportation, finding a smoking environment at work, and even finding entertainment.

Smoking is as addicting as narcotics or alcohol but does not make you dysfunctional. Many smokers have a craving for a cigarette in stressful situations. With help and motivation anyone is able to quit. Most pregnant women are able to quit during their pregnancy with the motivation of a healthy baby.

To quit smoking:

1) **Prepare to quit.** The American Cancer Society has had success with their “Great American Smokeout.” By establishing a quit date, you can prepare emotionally, prepare by not buying extra cartons of tobacco, and can prepare your home and workplace by getting rid of ashtrays and making these areas non-smoking. Pick a date that is meaningful to you – birth date, special anniversary, holiday, even a New Year’s resolution.

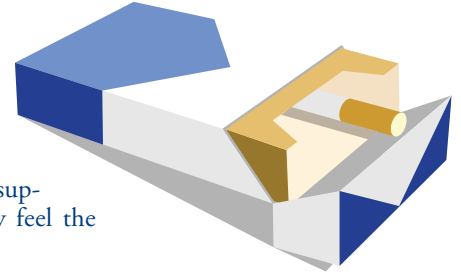


2) **Get help from your family, friends, and coworkers.** Tell them that you are going to quit and you want their support. Also, tell them that admonishing you is called nagging when it is given by a family member, friend or coworker. When it comes from your physician or counselor, it is called advice.

3) **Get help from your physician and voluntary agencies.** The public health service has a quit smoking consumer guide available from your health department or on the web ([www.cdc.gov/tobacco](http://www.cdc.gov/tobacco)). The American Lung Association, the American Heart Association,

and the American Cancer Society all have helpful programs. Nicotine Anonymous has a free phone line, (800) 642-0666. The Cancer Institute has a smoking quit line, (877) 44U-QUIT.

4) **Get help from other quitters.** People who quit smoking together are more often successful. They can commiserate together and support each other when they feel the need for another cigarette.



5) **Get pharmaceutical help.** Nicotine is a drug. You can help yourself by supplying nicotine in another fashion, such as gum, a patch, nasal spray, or an inhaler, while you withdraw from your habits. The nicotine patches are now available generically over-the-counter.

There are medications that can help decrease your urge to smoke. These are available by prescription by your physician. Bupropion (Zyban®) and varenicline (Chantix®) are prescription drugs that more than double your chance of quitting.

6) **Help yourself.** Smoking desire is partly addiction and partly habit. Look at your habits and find out what you do when you smoke. Do you have a cigarette in your hand when you have a cup of coffee? Try putting something else in your hand, such as a cinnamon stick. Change your routines where you find that smoking is your pleasure, find something else enjoyable to do every day. You should find other means to solve your depression or your bad mood. This can often be done by opening up and talking to your friends or your doctor.

7) **If you fail the first time do not despair.** In interviews with ex-smokers, the average permanent quitter had quit 8 times before finally quitting for good. Realize that being around other smokers can make you want to smoke. This is particularly true if you are using alcohol. You may gain weight as you change your desires from tobacco to food. Usually weight gain is less than 10 pounds. By staying active and eating a healthy diet you can avoid the weight gain.

If you relapse, reevaluate your smoking withdrawal. What worked for you last time? What did not work? Are you a person who needs to withdraw slowly or does “cold turkey” work better for you?

Quitting smoking can improve your health and the health of those around you.

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## Could your headache be caused by an allergic condition?

By Philip Gallagher, MD, FAAAAI

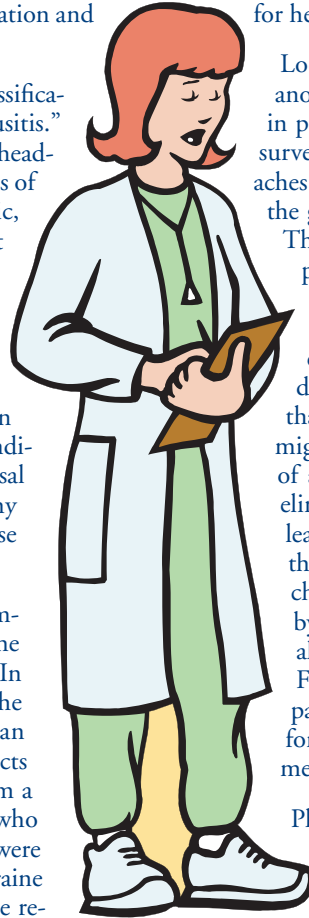
Patients and their physicians have long noted the association of headaches and allergic or infectious nasal problems. Quality of life assessment of patients with allergic rhinitis includes headache as a common problem which adversely impacts the lives of sufferers. Patients often refer to facial pain or pressure as “sinus headaches.” Experts in allergy, otolaryngology, and neurology feel that real sinus headaches occur infrequently. How can we explain the obvious discrepancy between the common observation and the precise diagnosis?

A 2004 International Headache Society (IHS) classification included “headache attributed to rhinosinusitis.” This referred to headaches that were: 1) frontal headaches accompanied by pain in one or more regions of the face, ears, or teeth, 2) clinical, nasal endoscopic, x-ray finding or laboratory evidence consistent with a sinus infection, 3) simultaneous onset of the headache and infection, and 4) resolution of the headache within seven days after remission or successful treatment of the sinus infection. The IHS still does not recognize chronic sinusitis as a cause for headache unless there is a relapse into an acute stage. The explanation as to how other conditions such as allergic rhinitis, deviation of the nasal septum, hypertrophy of nasal turbinates, atrophy of sinus membranes and mucosal contact can cause headaches has not been well explained.

Like allergic rhinitis, migraine headache is a common problem. The definition of migraine headache is much broader than most people are aware. In one large survey, only 48% of patients meeting the IHS definition of migraine reported a physician diagnosis of migraine. Forty-two percent of subjects had received the diagnosis of sinus headache from a physician. Another study recruited 100 subjects who felt that they had sinus headaches. Of these, 63% were diagnosed with migraine, 23% with probable migraine and 3% with headache due to rhinosinusitis. The remainder had other problems.

The reason that some migraine sufferers believe that their pain is due to their sinuses include pain over the sinuses, pain triggered by weather changes, pain associated with nasal stuffiness and discharge, seasonal variation, and exposure to allergens. Some patients with migraine experience facial symptoms mediated through the involuntary nervous system which can include nasal stuffiness, runny nose, eyelid swelling, tearing, and blood-shot eyes. It is no wonder that people can be confused. Factors favoring the diagnosis of migraine include attacks lasting 4-72 hours,

one sided location, pulsating quality, moderate to severe pain intensity, and worsening by routine physical activities such as walking or climbing stairs. Associated symptoms may be nausea and/or vomiting, intolerance of light, and intolerance of sound. The presence of these symptoms might prompt patients with allergic rhinitis and headaches and their physician to question if there is a migraine component to their problem. This would possibly lead to different medication for headaches that may be more effective.



Looking at the problem from the opposite perspective, another group studied the prevalence of migraine headaches in patients with and without allergic rhinitis. Of the group surveyed, 34% of patients with allergic rhinitis had headaches meeting the IHS criteria for migraines and only 2% of the group without allergic rhinitis had migraine headaches.

There is no proven explanation as to why the allergic rhinitis patients more frequently had migraines, but the authors of the study offered several explanations. Histamine is a mediator released in allergic reactions. It can cause vasodilation in arteries which is the first step involved in the development of a migraine headache. One study showed that administration of histamine produced migraines in migraineurs more often than in controls. Administration of an antihistamine to these subjects almost immediately eliminated the headache. Histamine also increases the release of nitric oxide (NO) which has been associated with the development of migraine headaches. In one study of children with migraines, 40% showed evidence of allergy by skin prick test or IgE levels. Treatment of these children's allergies decreased the migraine index from 2.45 to 0.33. From our clinical experience, we see relief of headaches in patients treated for allergic rhinitis. There is certainly need for more investigation regarding the impact of allergy treatment in relieving facial pain and migraine headache.

Physicians treating patients with allergic rhinitis and headache should be mindful of the IHS diagnostic criteria for migraines. Those with persistent migraine headaches in spite of control of allergic rhinitis may benefit from specific migraine therapy. Triptans can be helpful in many migraineurs who have failed therapy with standard NSAID's. Prophylactic medication may be helpful in preventing headaches in sufferers with frequent migraines.

The exact cause and effect relationship between allergic rhinitis and headaches is not completely clear. Physicians treating patients with migraines and nasal symptoms should consider appropriate evaluation and treatment of infectious and allergic causes of rhinitis. Those treating allergic rhinitis patients with headaches should consider the possibility of migraine.

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