

Fundamentals Of Asthma

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ABSTRACT

Chronic lung disease includes asthma, chronic bronchitis, and emphysema. Many people believe they have asthma because they seem to wheeze, and in fact they may have been told that they have asthma. However, many of them do not. Asthma can be diagnosed only by hearing the characteristic wheezing in the lungs with a stethoscope. Definitions for asthma and related respiratory conditions are very revealing and help to provide a differential diagnosis for asthma and other respiratory problems. In this paper these conditions are clearly defined, and an outline for NAET® testing and treatment that will help, if not eliminate asthma, is presented. NAET® treatment is also helpful for other respiratory problems, but the focus of this paper is asthma.

INTRODUCTION

An article in the December 2003 issue of *Discover* listed asthma as number one of the eight greatest unanswered questions of medical science. The other medical problems for which medicine has a number of unanswered questions and which will command the most attention and funding in the future include cholesterol, obesity, Alzheimer's disease, aging, regeneration, infectious diseases, and cancer (Lemley, 2003).

In North America alone, at least 20 million people have asthma. Women make up 60% of adult asthma patients, but

asthma is the leading chronic disease among children. Twice as many boys as girls have asthma (Krohn, Taylor, and Larson, 2000; Krohn and Taylor, 2002). Over the last 20 years, the incidence of asthma has tripled in the developed world. Its prevalence in this country has been increasing since the early 1980s in all age, sex, and racial groups. This is puzzling, because asthma does not appear to be contagious, and two decades are not long enough for a genetic change to be so widespread (Lemley, 2003). Genetics do indicate that if one parent has asthma, chances

are 1 in 3 that each child will have asthma. Both parents having asthma increases the chance that their children will have asthma (Asthma and Allergy Foundation of America, 2006).

Asthma accounts for two million emergency room visits each year, and every day in America fourteen people die from asthma. It is the leading cause of school absenteeism and is the fourth leading cause of work absenteeism, resulting in approximately 15 million missed or lost workdays each year. The annual cost of asthma is estimated to be close to \$18 billion (Asthma and Allergy Foundation of America, 2006). A 2005 survey found that 43% of people with asthma in the family reported not having enough money to pay for health care. Forty-four percent of these households skipped treatment, cut pills, or did not fill prescriptions because of cost (Manning, 2005).

COMMON RESPIRATORY PROBLEMS

BRONCHITIS

One of the conditions that may be mistaken for asthma is bronchitis. Bronchitis is inflammation of the mucous membranes of the bronchial tubes and may be either acute or chronic. It involves the trachea as well as the bronchi. Acute bronchitis is most often found in small children and the elderly or debilitated. Symptoms include the early symptoms of an upper respiratory infection or common cold, which progresses to chest pain, fever, and a dry, irritating cough. The cough may become more productive with fever and chills, and muscle soreness. Headaches may also develop and the chest may feel tight (Krohn and Taylor, 2002; Nambudripad, 2003).

Chronic bronchitis is one of the chronic obstructive pulmonary diseases. It occurs when the airways are always inflamed and there is increased secretion from the bronchial mucosa and obstruction of the respiratory passages. People with chronic bronchitis have chronic coughs and shortness of breath. The interference of airflow to and from the lungs with persistent cough and expectoration breeds infection. Any person who has a cough that lasts for at least three months out of a year for two consecutive years or more and is short of breath after minimal exercise has chronic bronchitis (Krohn and Taylor, 2002; Nambudripad, 2003). Acute bronchitis is reversible; chronic bronchitis may not be.

CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Chronic obstructive pulmonary disease is caused by loss of lung tissue, resulting in permanent lung damage with destruction and plugging of the airways. People with COPD have a mucus-producing cough in the morning, and continue to have respiratory symptoms throughout the day. In addition to chronic bronchitis, emphysema is an irreversible form of chronic obstructive pulmonary disease. In emphysema the person cannot move air in and out of the lungs effectively and the lungs remain expanded (Krohn and Taylor, 2002; Nambudripad, 2003). COPDs are usually caused by or linked to cigarette smoking.

VOCAL CORD DYSFUNCTION

Vocal cord dysfunction (VCD) is often mistaken for asthma. In vocal cord dysfunction acute upper airway obstruction results from the vocal cords inappropriately clamping shut upon inspiration. These patients have a terrible sense of panic and feel that they cannot breathe. They complain of choking and being unable to get enough air. Vocal cord dysfunction occurs in both children and adults. The cause of vocal cord dysfunction is unknown, although it appears to be associated with gastroesophageal reflux (Allen, 2006). Exercise is the only trigger for about half of affected athletes with VCD, and many times they are misdiagnosed as having refractory exercise-induced asthma (EIA). Symptoms typically occur during competition or hard training.

VCD can be distinguished from exercise-induced asthma on the basis of history, signs, symptoms, and spirometry. With VCD, symptom onset usually is less than 5 minutes into exercise, whereas with exercised induced asthma symptom onset is more than 10 minutes. Patients with VCD can hold their breaths, whereas those with asthma cannot. Recovery from VCD is quicker and there is no refractory period and no late-phase response with symptoms 6-8 hours after exercise as there is with exercise induced asthma. Throat tightness is a major complaint with VCD, but not with EIA. Loud inspiratory stridor, a croup type sound, is common in VCD, and it is loudest over the larynx. Expiratory wheezing predominates in asthma. There is no cyanosis with VCD, and it usually does not awaken patients during the night. In patients with VCD and no asthma component, inhalers worsen their symptoms rather than improve them. Unfortunately some patients have both VCD and asthma, which complicates the diagnosis and treatment of the patient (National Jewish, 2006).

ASTHMA

Many people who have been told that they have asthma do not. Asthma can be diagnosed only by hearing the wheezing in the lungs with a stethoscope. Wheezing is breathing with a rasp or whistling sound, resulting from the spasm of the bronchi. The wheeze is heard as a high-pitched musical noise through the stethoscope, mainly on exhalation. In very bad asthma the sound is heard on both inhalation and exhalation. Dyspnea, cough, and wheezing all occur in asthma. A common feature in adults is nocturnal awakening with dyspnea and wheezing. In fact, this is so common that if they are not present, a diagnosis of asthma is suspect (Fauci, *et al*, 1998).

Asthma is recurrent episodes of inflammation causing reversible spasms of the bronchial tubes. Once inflamed, the bronchial tubes become irritable or “twitchy” and too narrow when they are exposed to substances to which they are very sensitive. The narrowing is due to contraction or spasm of smooth muscle, edema of the mucosa, and mucus in the bronchi and bronchioles. People with asthma develop shortness of breath, wheezing, tightness of the chest, and coughing. The skin may be pale and moist with perspiration, and in severe attacks there may be cyanosis of the lips and nail bed. The dry cough of the early stages becomes productive with thick mucoid sputum as the attack progresses. Asthma can range from occasional wheezing to severe attacks. An attack that lasts for days and cannot be reversed is called status asthmaticus, and it can be fatal (Fauci, *et al*, 1998; Krohn and Taylor, 2002; Nambudripad, 2003).

There are two types of asthma: extrinsic and intrinsic. Extrinsic asthma is thought to be caused by allergens with an increase in serum IgE, and accounts for over half of the asthma cases in children and young adults (Krohn and Taylor, 2002). These allergens may include pollen, smoke, dust, animal danders, and automobile exhaust. Indoor air is probably responsible for much of the increase in asthma. Volatile organic compounds emitted by furniture, paint, glues, cleaning products, and many other substances may be triggers. Cockroaches and their droppings are a major trigger for asthma. Weather changes, aspirin, medications, cigarette smoke, cleaning agents, and perfume are among other triggers (Krohn and Taylor, 2000; Krohn and Taylor, 2002; Nambudripad, 2003).

It is postulated that other factors such as cold air and exercise cause intrinsic asthma. However, many studies show

that allergy plays a role in intrinsic asthma. This type of asthma can be secondary to chronic or recurrent infections of the sinuses, bronchi, or tonsils and adenoids. Hypersensitivity to bacteria causing the infection may be the cause of this type of asthma. Viruses will trigger symptoms of asthma in children (Asthma and Allergy Foundation of America, 2006). Hormonal fluctuations can trigger asthma in women, and asthma in mothers is a stronger determinant of early onset asthma in a child than paternal asthma (Krohn and Taylor, 2002).

Children who have eczema, hay fever, or food allergies at a very young age, and toddlers who have frequent bouts of respiratory infections, are at high risk for developing asthma. Gastroesophageal reflux can irritate the lungs and present as asthma. Reflux of stomach acid into the airway triggers the asthma. This possibility must be investigated and eliminated as a possible trigger in patients with asthma.

NAET® TESTING AND TREATMENT FOR ASTHMA

All patients have a trigger for their asthma, and these triggers for asthma must be identified. Many substances can trigger asthma, and in some cases can be difficult to determine (Nambudripad, 2003; Asthma Initiative for Michigan, 2006). Patients should have testing for many different substances to help determine all of the triggers for their asthma. NAET® treatment for all of the possible triggers can control, alleviate, and eliminate their asthma. The following categories are among those that should be considered.

FOOD

Foods can be triggers for asthma and almost any food allergen can serve as a trigger. Although there can be many others, egg, milk, seafood (particularly shellfish), peanuts, chocolate, corn, and nuts are common offenders. Food colorings and food additives such as tartrazine, benzoate, sulfites, and sulfur dioxide can also trigger asthma. In addition to food colorings and additives, spices are very important to eliminate as triggers. Food allergens occur not only in the foods we eat, but also in alcoholic beverages, nutritional supplements, medications, soaps, cosmetics, cookware, glues, toothpaste, paper, paints, printing inks, and many plastics

(Winter, 1999a, 1999b, and 1992; Krohn and Taylor, 2002; Nambudripad, 2003).

Eliminating or treating allergenic foods produces significant improvement in three-fourths of asthmatic children and in one-third of asthmatic adults. Many patients know which foods trigger their asthma and cause them to wheeze. If treating for the NAET® basics does not clear up the asthma, other foods and food exposures should be screened to determine other treatment possibilities.

PHENOLICS

Phenolics are compounds that occur naturally in both plants and animals. They give the substance its odor, taste, and in some cases, its color. Phenolics are composed of a benzene ring with one or more hydroxide groups attached to the ring. Some of these compounds have other functional derivatives or chemical groups attached, causing them to be classified into different chemical families, but the compounds are still basically phenolics (Harborne and Baxter, 1993). Phenolics occur in large amounts in foods and frequently make up the major allergenic portion of a food. In addition, they also occur in pollen (Shahidi and Naczki, 2004).

Coumarin is particularly important in asthma. Acetylsalicylic acid, caffeic acid, chlorogenic acid, cholesterol, cinnamic acid, dopamine, ferulic acid, gallic acid, malvin, naringenin, phenylisothiocyanate, rutin, salicylic acid, umbelliferone, and the various food dyes such as yellow dye #5 should also be tested and treated if the patient is positive to them. Acetylcholine chloride, benzoic acid, and indole are not phenolics, but are allergenic compounds in foods that can contribute to asthma and should be tested and treated if indicated (Krohn and Taylor, 2001).

CHEMICALS

Chemicals can cause coughing, bronchitis, chest pain, "air hunger," and asthma. Chemicals encountered both indoors and outdoors can trigger asthma. Indoor pollution, including building materials, furnishings, combustion products from heating systems, fumes from appliances, cleaning supplies, room deodorants, disinfectants, detergents, plastics, and insecticides can all be offenders in triggering asthma (Rea, 1992-1996).

Personal care products such as perfumes, cosmetics, deodorants, fabric softeners, and washing detergents can play a role in asthma (Winter, 1999a). Items encountered in the workplace such as photocopiers, computers and printers, correction fluid, magic markers, inks, and papers, particularly carbonless paper, are asthma triggers for many people (Wilson, 1993; Winter, 1992, 1999a; Krohn and Taylor, 2000). Legally prescribed medications can also trigger asthma. The very medications that are supposed to provide relief can actually contribute to asthma (Krohn and Taylor, 2002; Nambudripad, 2003).

Outdoor air is often not safe to breathe and can be a causative factor in asthma. Traffic exhaust and smog can increase outdoor pollution. Oil refineries, crop and lawn chemicals, paving materials, and smoke from wood fires cause problems for many people. Natural events, particularly forest fires and dust storms, can trigger asthma (Rea, 1992-1996). Screening for and treating common chemicals is a necessity for asthma patients.

POLLENS AND TERPENES

Pollens and terpenes frequently are triggers for asthma. Pollens are analogous to human sperm and participate the reproduction of plants. Plants produce pollen in large amounts to ensure their survival. All plants produce pollen, but it is the lightweight, windborne pollen that is the allergenic pollen (Krohn, Taylor, and Larson, 2000). Even though the number of allergenic proteins in pollens is somewhat limited, all pollen indigenous to an area should be screened and all positives treated.

Terpenes, which occur in both plants and animals, are similar to phenolics, and can also be triggers for asthma. Terpenes have an isoprene ring, whereas phenolics have a benzene ring. As do phenolics, terpenes also contribute to the taste, smell, and sometimes color of the plant. Terpene levels go up about a month before the pollen of a plant appears, and patients complain that a given pollen is bothering them when the pollen is not yet out (Rea, 1992-1996). Terpenes can be a potent asthma trigger and must be treated.

DUST, DUST MITES, AND MOLD

Dust, dust mite, and mold allergy participate in the cause of asthma symptoms for many people. People with a dust allergy will always wheeze when they clean house or go into a dusty area, such as a storeroom. Household dust has a high

content of organic matter, including plant and animal components. It also contains inorganic residues, and house dust in humid areas contains mold spores (Krohn, Taylor, and Larson, 2000).

Dust mites are microscopic animals that themselves are not allergenic and are not inhaled, as they have sticky feet that cling to surfaces. Their floating carcasses plus their excrement is inhaled and will trigger asthma in many patients. The average dust mite produces about 20 highly allergenic fecal pellets per day. Dust mites do not live in dry climates or at high altitudes. They prefer warm, humid environments, and dust mite allergy is as high as 25 percent in humid areas. People with a dust mite allergy are worse when beds are made and have repeated sneezing on awakening. They are also better outside the house (Krohn, Taylor, and Larson, 2000).

People with mold allergy are worse in late afternoon, as well as during the fall season when the molds spore. Mowing the grass, working in the yard, and tilling the soil exacerbate their symptoms. Rain and melting snow increase the sporing of mold and symptoms caused by mold allergy (May, *et al*, 2004). People who wheeze may have mold colonizing in their lungs. Any infection from the sinuses will affect the lungs and must be investigated and treated (Krohn, Taylor, and Larson, 2000).

Dust, dust mites, and mold spores can be spread throughout a house by a forced air furnace. Using NAET® to treat for dust, dust mites, and mold can reduce and eliminate asthma attacks.

ANIMAL DANDERS/FEATHERS

All animals, including humans, shed dander into the air. Dander is composed of skin scales and scurf (dandruff). It floats freely in the air and can remain in an area for days after an animal is removed. It may take years to remove all traces of hair and dander from a house. People may be allergic to human and animal dander, as well as to animal serum and saliva. Asthma, as well as hives, headaches, loss of voice, itching or watering eyes, and sneezing may be triggered by animal dander (Krohn, Taylor, and Larson, 2000).

Feathers may also be a trigger for asthma. Down pillows, comforters, and sleeping bags can trigger asthma in the sensitive person, as can feathered pets (American Lung Association of Texas, 2006).

MICROORGANISMS

Hypersensitivity reactions to bacteria causing infections can trigger asthma. Viruses can trigger asthma in children (Allergy and Asthma Foundation of America, 2006). Hypersensitivity reactions to *Candida albicans* and its byproducts can also be causative agents in asthma. Both current infections and debris and toxins from prior infections can trigger asthma (Krohn and Taylor, 2002). Because of the role infections play, particularly in intrinsic asthma, patients must be screened for bacteria, viruses, parasites, and fungi, and treated, using NAET®, for any organism to which they test positive.

TOBACCO SMOKE

Tobacco smoke can trigger asthma. Sidestream smoke, the smoke from smoldering tobacco (passive smoking), and mainstream smoke, the smoke drawn through the tobacco during inhalation (active smoking) both can be triggers, as can the use of smokeless tobacco, snuff. Environmental tobacco smoke is made up of extremely small particles that are distributed throughout a room by airstreams and convective currents and are breathed in by people in a room. Tobacco smoke is irritating to both smokers and nonsmokers. Smoke odors cling to walls, carpeting, furnishings, draperies, clothing, hair, and other materials. Allergic people frequently react to these smoke residues (Krohn, Taylor, and Larson, 2000; Krohn and Taylor, 2000).

Many adults who have asthma remember their problems developing when they were children in a smoking household. More than 6.4 million children living today will die prematurely because they made a decision to smoke when they were adolescents (CDC, 2006). NAET® treatment with tobacco smoke, from cigarette, cigar, and pipe smoke, as well as a tobacco sample or a snuff sample, will help alleviate asthma in the sensitive patient.

SARCODES

Sarcodes are homeopathic treatment substances made from healthy tissue, in contrast to nosodes that are made from diseased tissues or disease substances (Scientific Department

of Biologische Heilmittel Heel GmbH, 2000). Treating asthma patients with the lung vial or even treating their own lungs will help control and eliminate asthma. Some patients may also need treatment with vials for the parts of the respiratory system, including the trachea, bronchi, bronchioles, and air sacs, as well as mucous membranes.

reaction, infection, or hormonal problem, but is affected by it (Krohn, Taylor, and Larson, 2000). The role that emotions may be playing should be investigated with any asthma patient. Treatments for emotional aspects as well as treatments for releasing tissue memory are a must for complete recovery from asthma.

WEATHER

Weather can be a factor in asthma. Cold fronts can trigger asthma attacks, as can substances blown in with the wind (Leviton, 1989). Patients with asthma may have to be treated for cold, heat, humidity, wind, and other weather factors (Nambudripad, 2003).

EMOTIONS

As with any physical substance, emotions can play a role in asthma. The immune system is stressed and weakened by emotionally stressful events, which can include deaths, divorce, problems with relationships of all kinds, and problems at home and at work (Nambudripad, 2003). The immune system cannot determine whether the stress is from an allergic

CONCLUSION

Testing and treatment with NAET® can identify, alleviate, and eliminate most asthma and triggers for the asthma. This treatment can lessen the severity and frequency of attacks and make them more manageable until they can, in some cases, be eliminated. Foods, phenolic food compounds, chemicals, pollens and terpenes, dust and dust mites, mold, animal danders, microorganisms, tobacco smoke, sarcodes, weather, and emotions must all be considered in the treatment, control, and elimination of asthma.

ACKNOWLEDGEMENTS

The author would like to thank both Dr. Jacqueline Krohn and Dr. Devi Nambudripad for their help and inspiration in considering asthma and its complexity.

Detoxification, Second Edition. Port Roberts, WA: Hartley and Marks, 2000.

REFERENCES

Allen, James. "Vocal Cord Dysfunction." Ohio State University. http://home.columbus.rr.com/allen/vocal_cord_dysfunction.htm. 5 May 2006.

American Lung Association of Texas. "Asthma." <http://www.texaslunc.org/educationalresources/diseases/asthma/asthma.htm>. 14 May 2006.

Asthma and Allergy Foundation of America. "Asthma facts and figures." <http://www.aafa.org/display.cfm?id=8&sub=16&cont=409>. 28 April 2006.

Asthma Initiative of Michigan. "Asthma Triggers." http://www.getastmahelp.org/asthma_triggers.asp. 14 May 2006.

Fauci, Anthony S., Eugene Braunwald, Kent J. Isselbacher, Jean D. Wilson, Joseph B. Martin, Dennis L. Kasper, Stephen L. Hauser, and Dan L. Longo, Editors. *Harrison's Principles of Internal Medicine*, Fourteenth Edition. New York: McGraw Hill, 1998.

Harborne, Jeffrey B., and Herbert Baxter, Editors. *Phytochemical Dictionary – A Handbook of Bioactive Compounds from Plants*. Washington, DC: Taylor and Francis, 1993.

Krohn, Jacqueline, Frances Taylor, and Erla Mae Larson. *Allergy Relief and Prevention*, Third Edition. Port Roberts, WA: Hartley and Marks, 2000.

Krohn, Jacqueline and Frances Taylor. *Natural*

Krohn, Jacqueline and Frances Taylor. *Finding the Right Treatment*, Second Edition. Port Roberts, WA: Hartley & Marks, 2002.

Krohn, Jacqueline and Frances Taylor. *Phenolics and Other Allergens*. Los Alamos, NM: K and T Books, 2001.

Lemley, Brad. "The greatest unanswered questions of medical science." *Discover*. 2003 December: 24 (12): 70-76.

Leviton, Richard. "How the weather affects your health." *East West*. September 1989, 64-68, 112-113.

Manning, Anita. "Asthma Patients struggle with financial bills." *USA Today*. August 31, 2005. http://www.usatoday.com/news/health/2005-08-31-health-care-crunch-asthma_x.htm. 14 May 2006

Nambudripad, Devi. *Say Good-bye to Asthma*. Buena Park, CA: Delta Publishing Company, 2003.

National Center for Chronic Disease Prevention and Health Promotion. "Tobacco Information and Prevention Source." <http://www.cdc.gov/tobacco/issue.htm>. 13 May 2006.

National Jewish. "About Vocal Cord Dysfunction." <http://www.nationalhewish.org/disease-info/diseases/ved/about.aspx>. 5 May 2006.

Rea, William J. *Chemical Sensitivity*. Volumes 1-4. Boca Raton, FL: Lewis Publishers, 1992-1996.

Scientific Department of Biologische Helmittel Heel GmbH. *Biotherapeutic Index – Ordinatio Antihomotoxica et Materia Medica*, Fifth Edition. Baden-Baden, Germany: Heel, 2000)

Shahidi, Fereidoon, and Marian Naczki. *Phenolics in Food and Nutraceuticals*. Boca Raton, FL: CRC Press, 2004.

Wilson, Cynthia. *Chemical Exposure and Human Health*. Jefferson, NC: McFarland and Company, Inc. Publishers, 1993.

Winter Ruth. *A Consumer's Dictionary of Cosmetic Ingredients*. New York: Three Rivers Press, 1999a.

Winter Ruth. *A Consumer's Dictionary of Food Additives*. New York: Three Rivers Press, 1999b.

Winter, Ruth. *A Consumer's Dictionary of Household, Yard, and Office Chemicals*. New York: Crown Publishers, 1992.

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