<u>Alternative</u> <u>Treatments for</u> <u>Seasonal Allergies</u>

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Abstract

Objective: The purpose of this article is to review published literature discussing conservative care, including homeopathic treatment, chiropractic manipulation, and acupuncture, for the relief of seasonal and non-seasonal allergy symptoms. This article will demonstrate that allopathic medications are not the sole treatment available for the treatment of allergy symptoms.

Methods: A PubMed and Index to Chiropractic Literature search was performed. Sources were cross-referenced to obtain more article listings and suggestions. Studies were not limited to a certain time frame.

Results: Twenty references were analyzed and reviewed for this literary review. The literature analyzed shows that conservative therapy is effective for the use of treatment of seasonal and non-seasonal allergies, as well as treating other disorders.

Conclusion: Conservative treatment can be considered effective and safe in alleviating the symptoms of seasonal and non-seasonal allergies. Conservative treatment encompasses many forms, including chiropractic manipulation, traditional Chinese medicine, acupuncture, and supplementation. Further research on conservative treatment of allergies is needed due to the inadequate amount of peer-reviewed journals on the subject.

Key Words: allergy, allergies, acupuncture, homeopathic, seasonal, manipulation, supplement, fish oil

Allergies are defined as hypersensitive disorders of the immune system. An allergic reaction usually occurs when the immune system reacts to a usually normally harmless substance in the environment or within the body. A variety of tests exist to diagnose allergic conditions. These tests include placing possible allergens on the skin and looking for reactions such as swelling, redness, and warmth to the area. Blood tests can also be done to look for a response to a specific allergen. Allergies do not develop overnight. Every allergy goes through a phase within the body. Upon contact with an allergen, a person's immune system begins to alter. It usually takes a relatively long period of contact with an allergen for a person to acquire sensitivity, which explains why the first kiwi allergic responses came to be known years after kiwis first appeared on the market. Once the immune system has identified a substance as it's allergen, it pumps antibodies into the bloodstream to combat these 'invaders' each time there is contact with that substance. Even the slightest trace of the allergen can be enough to trigger an allergic reaction. Although scientists have a good understanding of how the allergic reaction itself develops, the reasons why someone develops sensitivity to an allergen remains unclear. Some common allergens are pollen, animal hair, dust mites, insect bites, mold, foods, latex,

medications, and perfume. A brief overview will be performed of these common allergies to try to better understand them. Pollen is produced by vegetation trees, grass, and flowering plants, and are spread by air, insects such as bees, and human contact. When inhaled or ingested, pollen particles cause a reaction in the respiratory system. Most plant life releases pollen into the air from spring to autumn seasons, which is why that time of the year is known as allergy season. Animal fur can be confusing, as many may assume it's the actual fur of the animal that causes the reaction. Contrary to popular belief, it is oil secreted by animals which is absorbed by their fur which contains protein that causes allergic reactions. This type of allergy may develop over a period of time. Dust mites live in the dust that collects around furniture, clothing, carpets, and even on humans and animals. It can be tricky to avoid this kind of an allergen as dust mites cannot be seen by the naked eye. Dust mites feed on bacteria, fungi and dead skin cells in dust balls which also cannot be seen, causing an increase of the allergen without easy prevention or treatment. Again it is not the actual dust mite that causes the reaction, but the proteins that the dust mites develop. An insect bite can be one of the most dangerous types of allergens. An insect stings or bites as part of its defensive mechanism. When an insect bites or stings, it leaves

proteins in the skin that are allergy triggers for some people. Mold is a easily visible allergen and has a distinct odor. It develops in damp and dark areas. When mold spores are touched or inhaled, they irritate the respiratory tract and cause respiratory allergic reactions. Mold acts similarly to pollen, except that it can persevere in freezing temperatures, whereas pollen can not. Some people develop allergies to foods such as shellfish, peanuts, wheat and milk. Such people produce antibodies against the substances found in the food. When they eat this food, their antibodies release histamine and trigger allergic reactions. Food allergies are another dangerous form of allergies to have. Latex is consists of sap from a rubber tree. This sap contains proteins that can trigger an allergic response in some people. When these people come in contact with latex, they immediately suffer an allergic reaction. Some people have immune systems that are not compatible with substances found in certain drugs. When a specific drug is ingested, it can cause a counter reaction or simply not have any effect as the body suddenly fights off the drug be eliminating it through the bowels. Some chemicals in perfumes irritate the inside lining of the nose and frontal sinus and trigger an allergy causing sneezing, headaches, eye irritation, and even swelling of the respiratory organs. Perfume can be difficult to avoid as there are many

types, made of even more substances which have not been researched extensively.

A common indicator for most of these allergens comes out to be protein secretion. The most logical solution would be to stay away from what one is allergic to, but this would be extremely difficult, as many of these allergens are so common and very hard to avoid and live a normal life. The next solution would be to go about normal daily activities without avoiding allergens, but poison our bodies with drugs that impair our complicated immune systems, ignoring the side effects and long term damage. In order to find a better solution that does more good than harm, we must first try and understand the human allergic response and how it is currently being treated.

Discussion

Antihistamines

"Allergic rhinitis, whether seasonal or perennial, is characterized by sneezing, rhinorrhoea, obstruction of the nasal passages, conjunctival and pharyngeal itching, and lacrimation. ...Allergic rhinitis is caused by the deposition

of allergens (often pollen) on the nasal mucous membranes, resulting in a type I hypersensitivity reaction."⁵

"Histamine is a chemical mediator participating in many cell physiology processes, among them allergic reactions..."¹² Simply put, when a person is in contact with a specific allergen, their body releases histamine as part of the inflammatory immune response to protect itself from that allergen. The release of histamine is what causes allergy symptoms.

"The classical antihistamines have always been associated with sedation and anticholinergic effects. Since the '80s research has attempted to avoid or prevent these unwanted side effects through the investigation and development of new active principles. Over the last decade, some of these new compounds have been shown to be associated to important drug interactions and potential toxicity.¹²

Currently, allergy symptoms are being treated by antihistamines. Although antihistamines are effective for treating allergies, they produce many side effects. "These reduce rhinorrhoea and sneezing but are less effective for nasal

congestion and may cause sedation and drowsiness." Antihistamines also interact with alcohol and may alter one's driving ability.⁵

In addition to sedation and drowsiness, antihistamines can cause other side effects as well, namely, side effects of the central nervous system. "An extensive review of literature has identified a number of tests which appear to be sensitive to the central effects of antihistamines. These include tests of psychomotor performance, sensori-motor co-ordination speed, information processing, sensory skills as well as physiological measures and subjective rating scales. Using this battery of cognitive and psychomotor tests, it is evident that only a very limited number of antihistamines can claim to be virtually free of both objective and subjective sedative effects..."¹³

One of the most common allergy symptoms is nasal congestion. "For stuffy nose, an oral decongestant, such as pseudoephedrine (Sudafed and generic) works, but also carry side effects, such as dizziness, heart palpitations, insomnia, nervousness, and increased blood pressure. Individuals with diabetes mellitus, glaucoma, high blood pressure, prostate enlargement, or heart, kidney, and thyroid disease should be told to avoid this class of medications.

Phenylephrine (Sudafed PE and generic) is safer, but it is less effective and still has tangible side effects. Decongestant nasal sprays or drops can actually worsen the condition if used for more than several consecutive days."¹⁰

Other than drowsiness and alcohol interactions, antihistamines can also cause more serious side effects. Research shows that antihistamines have been linked to cardiotoxicity and cardiac arrhythmias.¹² In reviewing the current material on antihistamines, one must wonder if there is something else available to alleviate allergy symptoms, or if allergy sufferers are forced to choose between tolerating allergy symptoms

, or living with their inherent side effects.

Alternative Treatments

In this section, alternative methods of alleviating allergy symptoms will be discussed, as well as any comparison studies reviewed.

"Acupuncture involves the stimulation of acupoints that are located at lines of meridians that correspond to the flow of energy through the body. Modern acupuncture has evolved other methods of stimulating acupoints including the use of electrical current, by applying pressure to the acupoint (acupressure) or using low intensity laser."⁷

Acupuncture is thought by some to be ineffective in treatment of conditions, but according to research, acupuncture produces anti-inflammatory effects, as well as anti-nociceptive and immunomodulatory effects that combat chronic inflammatory conditions in humans. Side effects to acupuncture are minimal, such as irritation to the needle site.⁶ Compared to the drowsiness, sedation, and cardiotoxicity side effects of antihistamines, minimal irritation to the needle site is a negligible side effect.

Chinese Herbal Medicine uses formulas of herbs and other living things to treat ailments. More than 3,000 herbs, 300 minerals and animal extracts are used in hundreds of different formulas. The herbs are boiled down or concentrated in another manner, depending on how they will be administered to the patient. The herbs are administered in the form of tea, powder, syrup, pills, or tinctures. Chinese herbal medicine focuses on energy and balance within the body. A study was performed to determine the efficacy of Chinese herbal medicine on seasonal allergies, and, "...the results of this study suggest that

traditional Chinese therapy may be an efficacious and safe treatment option for patients with seasonal allergic rhinitis."⁸

According to the American Chiropractic Association, "Chiropractic is a health care profession that focuses on disorders of the musculoskeletal system and the nervous system, and the effects of these disorders on general health. Chiropractic care is used most often to treat neuromusculoskeletal complaints, including but not limited to back pain, neck pain, pain in the joints of the arms or legs, and headaches. Doctors of Chiropractic – often referred to as chiropractors or chiropractic physicians – practice a drug-free, hands-on approach to health care that includes patient examination, diagnosis and treatment. Chiropractors have broad diagnostic skills and are also trained to recommend therapeutic and rehabilitative exercises, as well as to provide nutritional, dietary and lifestyle counseling. The most common therapeutic procedure performed by doctors of chiropractic is known as "spinal manipulation," also called "chiropractic adjustment." The purpose of manipulation is to restore joint mobility by manually applying a controlled force into joints that have become hypomobile – or restricted in their movement – as a result of a tissue injury. Tissue injury can be caused by a single traumatic event, such as improper lifting of a heavy object, or

through repetitive stresses, such as sitting in an awkward position with poor spinal posture for an extended period of time. In either case, injured tissues undergo physical and chemical changes that can cause inflammation, pain, and diminished function for the sufferer. Manipulation, or adjustment of the affected joint and tissues, restores mobility, thereby alleviating pain and muscle tightness, and allowing tissues to heal. Chiropractic adjustment rarely causes discomfort. However, patients may sometimes experience mild soreness or aching following treatment (as with some forms of exercise) that usually resolves within 12 to 48 hours."¹

A case report was published to show evidence that chiropractic care can relieve allergy symptoms, as well as asthma and an improvement in the patient's immune system. After the patient was adjusted using a low-force technique, he was monitored for improvements in his asthma and allergy symptoms. "This case report provides supporting evidence that chiropractic care can help balance immune system functioning and relieve asthma symptoms as well as colds and allergies."²

Butterbur, or *Petasites hybridus*, is an herb used to treat several common ailments, including allergies. The leaf, root, and bulb of the Butterbur plant is

used in teas, recipes, and in pill form for intake of the herb. A postmarketing surveillance study was performed and found that symptoms such as rhinorrhea, sneezine, red eyes, itchy eyes and nose, nasal congestion, and skin irritation were improved by 90% in people who were consuming Butterbur. Not only was the herb found to be effective in the treatment of allergy symptoms, it was found to be safe as well.¹¹ A randomized controlled trial of butterbur and cetrizine (brand name Zyrtec) for treating seasonal allergies was performed, and both were compared in efficacy. The trial found that: "The effects of butterbur are similar to those of cetrizine in patients with seasonal allergic rhinitis when evaluated blindly by patients and doctors. Butterbur should be considered for treating seasonal allergic rhinitis when the sedative effects of antihistamines need to be avoided."5

Energy Therapy is defined as: "...a broad category of modalities and practices that are intended to aid a person in maintaining health and recovering from illness." "Popular forms of energy medicine include light therapy, magnet therapy, music therapy, acupuncture, traditional Chinese medicine (TCM), moxibustion, cupping, Asian bodywork, Ayurveda, craniosacral therapy, crystal

therapy, healing touch (therapeutic touch), meditation, muscle testing, prayer/distant healing/faith healing, Qi gong, reflexology, reiki, and yoga."4

Because there are so many different varieties of, it is difficult to research the efficacy of energy therapy. These kinds of therapies are effective in improving the efficiency of the immune system, and also are effective in alleviating allergy symptoms. The inherent nature of these methods is low for side effects and contraindications, so energy therapy should be considered before ingesting antihistamines.¹⁰

Homeopathy is a form of alternative medicine which uses herbs and other various substances made from plant, animal, mineral, or chemicals components. Components are concentrated and mixed with a medium (usually water) and given to the patient to treat specific ailments. Homeopathy is intended to build a person's immune response to a specific substance. "Although the homeopathic principle of similar may be utilized in conventional allergy desensitization shots, there are substantial differences between conventional and homeopathic allergy treatment. First, desensitization shots are only used in the prevention of allergy symptoms, whereas homeopathic medicines are used for prevention or treatment

of allergies. Second, homeopathic medicines utilize much smaller doses.

Although sometimes the substance to which the person is allergic is prescribed in a homeopathic dilution, more frequently a medicine is given based on its ability to cause the similar complex of symptoms (beyond just the allergy symptoms) the sick person is experiencing."¹

A randomized controlled trial of homeopathy vs. placebo was performed, comparing both on their effects on allergic rhinitis. This was done to show the efficacy of homeopathy. The randomized controlled trial showed that the homeopathy group had a significant improvement in nasal airflow compared with the group given placebo, along with more subjective improvement than the placebo group.⁹ Some common homeopathic remedies for respiratory allergies are: Allium cepa (onion), Euphrasia officinalis (eyebright), Arsenicum album (white arsenic), Nux vomica (poison nut), Pulsatilla nigricans (windflower), Natrum muriaticum (sodium chloride aka salt), Soldidago viragaurea (goldenrod), house dust mite, Blatta orientalis (Indian cockroach), Kali bichromicum (Potassium dichromate), and *Histaminum* (Histamine)."Homeopathic doses of specific allergens or individually-selected homeopathic constitutional medicines

have been shown to be effective in the treatment of various respiratory allergies, including patients suffering from hay fever, allergic rhinitis, and asthma.¹

Conclusion

When considering the options for treating seasonal allergies, there are many options that are less harmful than prescribed and over the counter antihistamines. Not only do alternative methods work just as effectively as antihistamines, they also have fewer side effects. One should try these alternative methods before considering a harmful antihistamine.

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