Acupuncture Beats Antihistamines For Allergic Rhinitis

Published by <u>HealthCMI</u> on 05 April 2018.



symptomatic drug intervention."

German researchers confirm the effectiveness of acupuncture for the treatment of allergies and sinus disorders. In an eight-week clinical trial, patients receiving acupuncture required less medications and had fewer seasonal allergic rhinitis symptoms than control groups. Likewise, quality of life scores were significantly better in the acupuncture group than in either control group. Based on the evidence, the Charité – Universitätsmedizin Berlin researchers conclude that "acupuncture treatment was more effective than the

The researchers screened 1,588 patients and accepted 414. Eligibility was determined at the outset of the local pollen season (i.e., March–May). All patients had seasonal allergic rhinitis for a least two years. The inclusion age range was limited (16–45 years). Participants in both the verum acupuncture treatment group and the sham acupuncture control group were blinded to treatment group allocation. The patients did not know whether they received real or sham acupuncture. An additional control group received only antihistamine medication (i.e., cetirizine). Two patients also took methylprednisolone.

A total of 60% of acupuncture patients self-administered antihistamine medications during the eight week treatment intervention period. A total of 71% of patients in the sham control group self-administered antihistamines and 82% self-administered antihistamines in the drug-only group.

Patients in the acupuncture group used antihistamines 8.92 days on average during the intervention period. Sham acupuncture group patients used antihistamines for an average of 13.41 days and the drugs-only group for an average of 18.07 days.

Acupuncture patients did not increase use of drugs from onset to the peak of pollen season. Patients in the other control groups increased antihistamine consumption. The researchers add, seasonal allergic rhinitis "symptoms decreased significantly in the acupuncture group compared with the other study groups." Patients receiving verum acupuncture were needled at the following acupuncture points:

- LI4 (Hegu)
- LI11 (Quchi)

- LI20 (Yingxiang)
- Yintang (extra)

At a minimum, three of the following eight acupuncture points were added during each treatment session:

- Bitong (extra)
- GB20 (Fengchi)
- LV3 (Taichong)
- LU7 (Lieque)
- ST36 (Zusanli)
- SP6 (Sanyinjiao)
- TB17 (Yifeng)
- BL13 (Feishu)

In addition, at least three more acupuncture points were added per each acupuncture session. The acupuncture treatment group received eight weeks of true acupuncture treatment. In summary, patients receiving acupuncture had less drug intake and less symptoms than patients in the medication-only or sham acupuncture control groups.

The researchers provided a general background. They note that allergic rhinitis (inflammation of the nasal mucous membranes) is common, affecting approximately 23% of European adults. Allergic rhinitis usually presents with other symptoms triggered by allergens including sneezing, itching, nasal obstruction, or rhinorrhea (i.e., runny nose). The antihistamine cetirizine was chosen because it is "one of the most prescribed antihistamines" in Germany. Possible cetirizine adverse effects include drowsiness, headaches, dizziness, fatigue, or sore throat.

The researchers reference a report by Schäfer et al. noting that 18% of seasonal allergy patients in Germany have had acupuncture for the treatment of the condition. The results of the current investigation "showed significant changes in favour of acupuncture treatment, including improvements in RQoL [rhinitis-specific quality of life] and SAR [seasonal allergic rhinitis] symptoms scores." The research team notes that 38% of patients receiving acupuncture did not use any antihistamines and only 16% of patients in the drugs-only group did not use antihistamines. They add that acupuncture reduces antihistamine use and "can therefore be considered a valuable, additional treatment option for patients with SAR."

Prior research by Reinhold et al. is consistent with these findings, concluding that "Acupuncture is an effective intervention that results in improved quality of life in patients with SAR." An investigation by Brinkhaus et al. produced similar findings, "In patients with allergic asthma, additional acupuncture treatment to routine care was associated with increased disease-specific and health-related quality of life compared to treatment with routine care alone."

Zheng et al. tested the efficacy of acupuncture for the treatment of allergic rhinitis with a different approach. They chose a laboratory investigation. Acupuncture was applied for a total of one minute, once per day, for 10 days. They conclude, "Warm acupuncture can improve the symptoms of AR [allergic rhinitis] rats, which may be associated to its effect in inhibiting the expression of serum IgE, IL-1 β and TNF- α ." The acupuncture intervention was the application of warm needle acupuncture to the following acupoints:

• GB 20 (Fengchi)

- Yintang (extra)
- LI 20 (Yingxiang)

Acupuncture outperformed the control group and the medication group (fluticasone propionate) for both reduction of symptoms and downregulation of serum IgE, IL-1 β , and TNF- α . These substances are proinflammatory mediators. IgE is an antibody that functions in immunity but is also involved in hypersensitivity related to asthma, sinusitis, and allergic rhinitis. IL-1 β is a proinflammatory cytokine with pyrogenic (fever producing) properties. TNF- α is another cell signaling protein (cytokine) with proinflammatory actions. It is involved in systemic inflammation, acute reactions, and is an endogenous pyrogen. Results were confirmed with enzyme linked immunosorbent assays.

Modern research supports the use of acupuncture for the treatment of allergic rhinitis. Patients interested in learning more about acupuncture as a treatment option are encouraged to contact local licensed acupuncturists to learn more.

References

Adam, Daniela, Linus Grabenhenrich, Miriam Ortiz, Sylvia Binting, Thomas Reinhold, and Benno Brinkhaus. "Impact of acupuncture on antihistamine use in patients suffering seasonal allergic rhinitis: secondary analysis of results from a randomised controlled trial." Acupuncture in Medicine (2018): acupmed-2017, Charité – Universitätsmedizin Berlin.

Reinhold, Thomas, Stephanie Roll, Stefan N. Willich, Miriam Ortiz, Claudia M. Witt, and Benno Brinkhaus. "Cost-effectiveness for acupuncture in seasonal allergic rhinitis: economic results of the ACUSAR trial." Annals of Allergy, Asthma & Immunology 111, no. 1 (2013): 56-63.

Brinkhaus, Benno, Stephanie Roll, Susanne Jena, Katja Icke, Daniela Adam, Sylvia Binting, Fabian Lotz, Stefan N. Willich, and Claudia M. Witt. "Acupuncture in patients with allergic asthma: a randomized pragmatic trial." The Journal of Alternative and Complementary Medicine 23, no. 4 (2017): 268-277.

Zheng, X. L., Y. P. Tian, H. Y. Luo, Y. D. Zhao, X. Y. Liu, Y. Jiang, C. X. Ma, M. J. Wang, and M. Liu. "Effect of Warm Acupuncture on the Levels of Serum Immunoglobulin E, Interleukin-1 β and Tumor Necrosis Factor- α in Rats with Allergic Rhinitis." Zhen ci yan jiu= Acupuncture research 43, no. 1 (2018): 35-38.