

Herbal remedies for hay fever

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Allergic diseases are among the most common diseases for which patients seek assistance from alternative medications. Only two herbal preparations, however, have been shown in clinical trials to be effective in relieving the symptoms of allergic rhinitis.



Allergic rhinitis is a common disorder, affecting up to 40% of the Australian population.¹ Formal studies have shown that allergic rhinitis significantly impairs the quality of life of affected patients, in many respects to a similar extent as asthma or diabetes.² Allergic diseases are among the most common diseases for which patients seek assistance from alternative medications,³ even though most herbal and natural therapies have not been subjected to appropriate trials to prove efficacy. Some reasons for the popularity of these therapies are listed below.

- Many patients self-medicate initially, and their first port of call is the pharmacy. Antihistamines and most intranasal corticosteroids are available over the counter or on the advice of the pharmacist. A stroll through several pharmacies will reveal an increasing amount of shelf space dedicated to herbs and alternative therapies, several of which are promoted for use in 'hay fever' and 'sinusitis'. The similar accessibilities of antihistamines, intranasal corticosteroids, topical and oral decongestants and herbal or

'natural' medications make it difficult for people to distinguish between these agents.

- There is a trend for patients to prefer 'natural' treatments rather than 'drugs', especially where prolonged treatment may be required.
- Allergy symptoms persist despite modern medical treatment for a number of reasons, including:
 - drugs are used incorrectly (patients expect immediate symptomatic relief from the use of intranasal corticosteroids)
 - patients have continuing antigen exposure.
- Even with optimal medical therapy, up to 62% of patients will not experience adequate benefit from medical treatment.⁴

Many patients do not distinguish between allergic rhinitis ('hay fever') and frequent or recurrent upper respiratory infections (colds). Hence, the same preparations tend to be used in both situations, especially as many people self-medicate initially.

GPs are usually consulted for more serious and unresponsive allergic disease. They may be asked for their comments on the efficacy of various herbal medications, or they may need to consider potential drug interactions between the herbal

medication and other medications that patients may be taking.

Horseradish, garlic and echinacea

Among the most popular alternative therapies for the relief of hay fever and sinusitis symptoms are horseradish and garlic, which are presented in many commercial preparations in variable proportions and with a range of other agents, such as vitamin C, echinacea (coneflower), fenugreek and marshmallow.

An extensive review (unpublished) of the medical literature has failed to provide any convincing references to the use of horseradish or garlic as antiallergy preparations or for treatment of upper respiratory symptoms. These herbs do, however, have other properties. Horseradish has some mild diuretic properties, has been reported to slow blood clotting after any injury and can potentially interact with anticoagulants and antiplatelet factors such as aspirin and clopidogrel. Also, it has been reported to have antithyroid properties, it has been applied to the skin as a poultice to relieve muscle aches, and in sufficient amounts it can be a gastrointestinal irritant, leading to diarrhoea, vomiting and even gastrointestinal bleeding. Garlic has been promoted as an agent to lower cholesterol and delay atherosclerosis,⁵ and has been reported to increase

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the INR in patients on warfarin.

Another popular preparation is echinacea, which has been promoted as a stimulus to the immune system and to protect against upper respiratory symptoms. Echinacea has been widely studied, mainly in the context of upper respiratory infections, and, despite conflicting literature, efficacy has not been proven.⁶ Large amounts of echinacea are consumed in Australia. The genus *Echinacea* is a member of the plant family Compositae, which is well represented as a cause of allergic reactions. The most commonly reported adverse effects with echinacea are gastrointestinal upset and nonspecific rash, although some severe anaphylactic reactions have been reported in Australia and elsewhere, especially in atopic patients.⁷

Chinese herbal medicines

A recent review has identified only two randomised double-blind placebo-controlled clinical trials of the efficacy of Chinese herbal medicines in the treatment of allergic rhinitis.⁸

In one trial, a preparation called Biminne, which contains 11 different herbs, was shown to be effective in perennial allergic rhinitis, a condition in which efficacy is often difficult to establish.⁹ Biminne showed statistically significant benefit in reducing sneezing, in overall response, and in improved quality of life. Interestingly, as with antihistamines, there was no improvement in nasal obstruction. Biminne is available commercially in a limited number of pharmacies in Australia. The original studies required the patient to take five capsules twice a day, although a dose-response study suggested that a lesser amount would also be effective. One interesting aspect of this trial was that patients who had taken the active agent over the three-month trial period had continued improvement when surveyed 12 months later. This suggests that the preparation had some long-lasting effects. The mechanism of action is unknown.

There was a statistically significant reduction in total serum IgE levels, suggesting some effect on the immunopathology of the condition.

In a similar double-blind placebo-controlled study, a preparation comprised of 18 different herbs showed significant benefit in seasonal allergic rhinitis compared with placebo.¹⁰ This preparation is not commercially available, and further work is being undertaken into the pharmacology of the preparation and the possibility of reducing the number of herbs.

The individual herbs in both these trials are listed by the TGA as being safe for human consumption. There were no significant side effects reported in either trial. Despite dire warnings about the risks of herbal preparations, the preparations used for allergic rhinitis appear to be relatively safe, at least those which are approved for use in Australia by the TGA. Interactions with prescribed drugs are a concern, but in some cases (St John's wort, ginkgo, ginseng, garlic and kava, for example) they are well recognised.¹¹

Conclusion

Only two herbal preparations have been shown in clinical trials to have efficacy at relieving the symptoms of allergic rhinitis. One requires large doses of capsules and is available only in restricted outlets, and the other is not commercially available in Australia. There seems to be no convincing evidence supporting the use of horseradish, garlic or echinacea preparations for allergic rhinitis.

Most patients will have made their own decisions before consulting their doctors regarding their hay fever. The results of conventional medicine in the treatment of allergic rhinitis leave a lot to be desired, and this is one reason why patients may use alternative medications. Doctors should be aware of potential interactions between herbal remedies and prescription drugs, particularly warfarin.

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