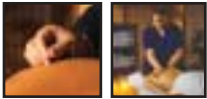




Echinacea:

Can it Help Combat URIs?

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Echinacea, also named purple coneflower, coneflower and American coneflower, is a commonly used herb in North America. Of the nine known native species, *Echinacea purpurea*, *Echinacea angustifolia* and *Echinacea pallida* are most commonly used. The entire plant is used, fresh or dried, to make teas and can be squeezed to make extracts. Many of my patients rave about its ability to decrease or stop the symptoms of upper respiratory infections (URIs).

Standardized echinacea extract or placebo was given to eight horses for 42 days. Echinacea increased the phagocytic ability of isolated neutrophils in the horses, boosted peripheral lymphocyte counts, stimulated the neutrophil migration from peripheral circulation into the tissues and increased the size and concentration of peripheral red blood cells and the concentration of hemoglobin and packed cell volume.

Often, when randomized control trials (RCTs) did not show positive findings, the poor outcomes were blamed on the use of the wrong part of the herb, inadequate concentrations, the use of the wrong type of echinacea or that the preparations were started too late. There is also controversy about the different methods of

What do the studies show?

Echinacea is helpful

- Ninety-five subjects with early symptoms of cold or flu received Echinacea Plus® tea, five to six cups per day, titrating to one over five days or placebo. There was a statistically significant decrease in symptoms in a shorter period of time in the Echinacea Plus® group. There were no side-effects reported by any of the subjects in either group.
- Two hundred eighty-two subjects, 18 to 65 years of age, with a history of two or more colds in the previous year, received either echinacea from freshly harvested *E. purpurea* plants (commercially available as Echinilin) or placebo at the first symptom of a cold. They consumed 10 doses the first day and four doses per day on subsequent days, for seven days. Severity of symptoms and dosing were recorded daily. A nurse examined the subjects on the mornings of days three and eight of their cold. One hundred twenty-eight subjects contracted a common cold. The total daily symptom scores were found to be 23.1% lower in the echinacea group than in the placebo group. Throughout the treatment period, the response rate to treatments was greater in the echinacea group. A few adverse event profiles were observed in both groups.
- Four hundred thirty children, one to five years of age, were randomized to take either the herbal extract preparation Chizukit™, containing 50 mg/ml of echinacea, 50 mg/ml of propolis and 10 mg/ml of vitamin C or placebo (5.0 ml and 7.5 ml, twice daily, for ages one to three years and four to five years, respectively) for 12 weeks. There was a 55% reduction in the number of illness episodes, a 50% reduction in the number of episodes per child and a 62% reduction in the number of days with fever per child in the echinacea group. The total number of illness days and the duration of individual episodes was also significantly lower in the Chizukit™ group. Adverse drug reactions were rare, mild and transient.
- A Cochrane review of eight randomly controlled trials found six positive studies and findings suggesting that the herb might be effective in the treatment of the common cold. The review found it difficult to compare echinacea trial results, as the preparations varied greatly. There was not enough evidence to support a particular product or type of preparation.

Cont'd on page 36 →

Echinacea does not work

- Four hundred thirty-seven young adults were given either one of three echinacea preparations with distinct phytochemical profiles that were produced by extraction from *E. angustifolia* roots with supercritical carbon dioxide, 60% or 20% ethanol or a placebo. There were seven subgroups among the volunteers that received the various combinations of echinacea and/or a placebo in two phases: a prophylaxis phase and a treatment phase. The prophylaxis phase lasted seven days. On the seventh day, the already-treated volunteers were exposed to a nasal mist containing the common-cold virus. There were no statistically significant effects of the three echinacea extracts on rates of infection, severity of symptoms or virus titres.
- One hundred twenty-eight patients were given either 100 mg of *E. purpurea* (freeze-dried, pressed juice from the aerial portion of the plant) or a placebo, three times daily, within 24 hours of cold onset, until cold symptoms were relieved or until the end of 14 days, whichever came first. Symptoms were scored subjectively by the patient and recorded daily in a diary. There was no statistically significant difference for either total symptom resolution.
- Four hundred seven healthy children two to 11 years of age were given either echinacea or placebo for up to three upper respiratory infections (URIs) in a four-month period. Study medication was begun at symptom onset and continued throughout the URI, for a maximum of 10 days. There was no statistically significant difference in the duration or severity of symptoms. There was no difference in the rate of adverse events, but rash occurred in 7.1% of the URIs treated with echinacea and in 2.7% of those treated with placebo. However, there was a significantly lower incidence of subsequent URIs in those children receiving echinacea.
- One hundred forty-eight students were given *E. purpurea* in an encapsulated mixture of unrefined *E. purpurea* herb (25%) and root (25%) and *E. angustifolia* root (50%) from Shaklee Tecnica, 1 g doses, six times per day on the first day and three times per day for up to nine days, or placebo for the treatment of the common cold. No significant difference on any outcome measure, including cold duration and symptom severity measures, was found.
- In a structured review of 322 articles related to echinacea and colds, nine placebo-controlled clinical trials were found. Of the nine studies, two met the 11 criteria of an unbiased study. The results of both studies were judged to be negative by the people who performed the studies. Of the remaining seven studies, six were judged to have positive results and one had negative results. The criterion most commonly not met was proof of blinding. This structured review suggested that the possible therapeutic effectiveness of echinacea in the treatment of colds has not been established.

extraction.

It is usually advised that echinacea should not be used in patients with immune dysfunction or autoimmune disorders like multiple sclerosis, tuberculosis, AIDS or lupus.



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Resources

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