Purpose of the Study. To determine if echinacea is effective in reducing the duration and/or severity of upper respiratory infection (URI) symptoms in children and assess its safety in this age group.

Study Population. Five hundred twenty-four healthy children, aged 2 to 11 years, were enrolled from a practice-based pediatric research network and an alternative-medicine institution in the Seattle, Washington, area. Each child was enrolled in the project for a 4-month period in 2 consecutive years during the peak rhinovirus season. Data were collected on up to 3 URIs per study patient. Twenty-three percent of the children in the active-treatment group were in a day care setting versus 13% in a placebo group.

Methods. This was a randomized, double-blind, placebo-controlled trial of echinacea for up to 3 URIs over the 4-month study period. Study medication was begun at the onset of symptoms and continued throughout the URI for a maximum of 10 days. Primary outcomes were duration and severity of symptoms and adverse events recorded by parents.

Results. Data were analyzed on 707 URIs that occurred in 407 study patients. Median duration of URIs was 9 days. There was no difference in duration between URIs treated with echinacea or placebo (P = .89). There was also no difference in the overall severity of URI symptoms between the 2 treatment groups (P = .69). There were no statistically significant differences between the 2 groups for peak severity of symptoms, number of days of peak symptoms, number of days of fever, or parental global assessment of severity of the URI. There was no difference in the rate of adverse events reported in the 2 treatment groups; however, rash occurred during 7.1% of the URIs treated with echinacea and 2.7% of URIs treated with placebo (P = .008).

Conclusions. Echinacea as used in this study was not effective in decreasing duration or severity of URI symptoms in healthy children 2 to 11 years old. Its use was associated with an increased risk of rash.

Reviewer's Comments. Echinacea, derived from wildflowers from the daisy family (family Compositae), is one of the most commonly used herbal preparations in the United States, with reported sales of more than $300 million annually despite limited evidence of clinically beneficial effects in the treatment of viral respiratory infections. This study is one of the largest randomized, controlled trials of echinacea treatment in patients of any age. In addition to the large sample size, the validity of the results is strengthened because enrolled patients had sought care from both traditional and alternative providers in an attempt to negate the effects of preconceived biases about echinacea. These data provide additional information regarding lack of efficacy of echinacea in treating the 6 to 8 colds an average child has each year.
Echinacea purpurea Therapy for the Treatment of the Common Cold: A Randomized, Double-Blind, Placebo-Controlled Clinical Trial

Allen Adinoff

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