

FROM THE FAMILY PRACTICE INQUIRIES NETWORK

Do nasal decongestants relieve symptoms?

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■ EVIDENCE-BASED ANSWER

Oral and topical nasal decongestants result in a statistically significant improvement in subjective symptoms of nasal congestion and objective nasal airway resistance in adults' common colds (strength of recommendation [SOR]: **A**, based on randomized controlled trials). Evidence is lacking to support the use of decongestants in acute sinusitis.

■ EVIDENCE SUMMARY

Nasal congestion is the most common symptom of the common cold, and hundreds of millions of dollars are spent annually on decongestants. A Cochrane review of 4 randomized controlled trials compared single doses of oxymetazoline, pseudoephedrine, and phenylpropanolamine.¹ Included studies involved from 30 to 106 participants, were double-blinded and placebo-controlled, used either topical or oral decongestants for symptoms of less than 5 days' duration, and measured either subjective or objective relief or adverse events. All 4 studies used nasal airway resistance as an objective measure of nasal congestion, and a combined symptom score as a subjective measure of relief. One study also administered a side-effect questionnaire.

In all studies, topical and oral decongestants were equally efficacious, producing a 13% reduction in subjective symptoms and a significant decrease in nasal airway resistance after 1 dose of decongestant. Only 1 study investigated repeated doses of decongestants and found no significant additional improvement from repeated doses over a 5-day period.

More studies are needed to evaluate efficacy of multiple doses. Clinical interpretation of these results must take into consideration that quality-of-life measures were not evaluated and that none of the studies included

children under 12.

Limited data are available on decongestants in sinusitis. Most studies focused on the use of nasal corticosteroids. One placebo-controlled, randomized controlled trial evaluated the effect on mucociliary clearance from adding nasal saline, nasal steroids, or oxymetazoline to antibiotics in acute bacterial sinusitis.² The group using oxymetazoline increased mucociliary clearance immediately (within 20 minutes). However, at 3 weeks, the improvement in mucociliary clearance in the oxymetazoline group was not significantly different than in the other groups.

An additional prospective, placebo-controlled study evaluated improvement in x-ray findings as well as subjective symptoms in acute sinusitis using phenoxymethyl-penicillin (penicillin V) in combination with oxymetazoline or placebo administered via a variety of nasal delivery systems.³ Oxymetazoline was not significantly different from placebo. Controlled prospective studies are lacking to support the use of decongestants in acute sinusitis.

■ RECOMMENDATIONS FROM OTHERS

Expert opinion from Current Clinical Topics in Infectious Diseases does not recommend the use of decongestants in sinusitis or the common cold in the absence of concurrent allergic rhinosinusitis.⁴ This recommendation is based on the lack of evidence regarding efficacy and the known rebound congestion associated with topical decongestants. If a decongestant is prescribed, the oral route is preferred, with the understanding of potential significant side effects of nervousness, insomnia, tachycardia, and hypertension.

CLINICAL COMMENTARY

Decongestants can do more harm than good

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Never one to have been impressed with most of the current symptomatic treatments available for the common cold, I have for years been amazed at how quick the public is to purchase and repeatedly use these products.

While a judicious course of decongestants can ease the congestion, when misused they often cause significant harm and discomfort that is difficult to resolve. Patients whom I have assisted through successful discontinuance of topical nasal decongestants are among the most appreciative in my practice.

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