Review: a single dose of nasal decongestant reduces congestion in the short term in adults with the common cold; insufficient evidence exists on the effectiveness of repeated doses


Q Are nasal decongestants effective for reducing the symptom of nasal congestion in adults and children with the common cold? Are adverse effects associated with use?

CONCLUSIONS
A single dose of nasal decongestant reduces nasal congestion in the short term in adults with the common cold. Insufficient evidence exists on the effectiveness of repeated doses over several days. No studies of children were identified.

METHODS

Data sources: Cochrane Central Register of Controlled Trials (Cochrane Library, Issue 1, 2004), Medline (1996 to February 2004), EMBASE/Excerpta Medica (1996 to February 2004), Current Contents (February 2004), hand searches of review citations from other references, and contact with known principal investigators and pharmaceutical companies.

Study selection and assessment: randomised controlled trials (RCTs) in any language that compared topical or oral single active nasal decongestants (aerosol spray, drops or dry powder, tablets or capsules) with placebo (>12 patients/group) in adults or children who had the common cold (presence of upper respiratory tract infection), with onset of symptoms <5 days before the start of the study. Exclusion criteria: patients with nasal congestion arising from allergic or chronic rhinitis and studies of combined treatments or warm, humidified air, steam, and aromatic vapours.

Outcomes: subjective symptom scores for nasal congestion, objective measures of nasal airways resistance (assessed using rhinomanometry), and adverse events.

MAIN RESULTS
5 studies (286 adults) met the selection criteria. No studies of children were identified. Nasal decongestants assessed were topical oxymetazoline, oral phenylpropanolamine (norephedrine), and oral pseudoephedrine; all studies used the recommended effective dose of the drug. 4 trials assessed a single dose of nasal decongestant, and 1 trial assessed repeated doses.

Meta-analysis showed that a single dose of decongestant significantly reduced both subjective and objective assessment of nasal congestion (table). In the repeated dose study, nasal decongestants used twice daily over a 5 day period did not differ from placebo for symptom scores (table). Studies did not systematically report data on adverse events.

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