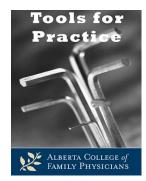
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Reviewed: August 4, 2016 Evidence Updated: Updated Cochrane review Bottom Line: Minor change First Published: January 7, 2013



## Antihistamines for the Common Cold: Facts on a Possible Fix?

Clinical Question: Are antihistamines effective in treating symptoms of the common cold?

Bottom Line: Antihistamines alone have little meaningful impact on the common cold. Weak evidence suggests antihistaminecombination products improve global symptoms of the cold for one in every four to seven treated. "Cough and cold" products should not be used in children under six.

**Evidence:** Four systematic reviews of antihistamines alone and one of antihistamine combination.

Antihistamines alone:

- Cochrane<sup>1</sup> review of 18 Randomized Controlled Trials (RCTs) including 4,342 patients:
  Compared to placebo, antihistamines resulted in:
  - Any improvement in severity of general symptoms at days one-two: 55.3% versus 62.3%, Number Needed to Treat (NNT)=15.
    - But not at days <u>></u>three.
  - Inconsistent, non-clinically meaningful changes in individual symptoms on fourfive-point scales.
    - No change in nasal congestion.
    - Improved rhinorrhea on days two and four only: Best day two, change 0.15 (95% Confidence Interval [CI], 0.04-0.27).
    - Improved sneezing on days one-four: Best day three, change 0.31 (95% CI 0.15-0.46).
- Three other systematic reviews: 2-4 Similar results to Cochrane review.

## Antihistamine combination:

- Cochrane: 5 Compared to placebo:
  - o Antihistamine with decongestants (12 RCTs) improved global symptoms, NNT=4.
  - o Antihistamine with analgesia (three RCTs) improved global symptoms, NNT=4-7.

- Antihistamine with decongestant and analgesia (five RCTs) improved global symptoms, NNT=6.
- The included studies did not compare these combinations to products without antihistamines to assess the contribution of antihistamines on symptom improvement.

## Context:

- Estimated 40% of time lost from work is attributable to the common cold.<sup>6</sup>
- All of the studies reported are at high or unclear risk of bias.<sup>1,5</sup>
- Adverse events were poorly reported, but more common with antihistamines versus placebo, Number Needed to Harm (NNH)=34.1
  - o Combination therapies may increase adverse event rates.<sup>5</sup>
- Benefits seen in antihistamine combination products likely arise from the additive effects of two-three products with minimal individual effects.
- Health Canada<sup>7</sup> recommends against using over-the-counter cold medicines in children under age six because:
  - o Children do not benefit from antihistamines alone<sup>1</sup> or in combinations.<sup>5</sup>
  - Antihistamines and "cough and cold preparations" are second and sixth (respectively) most common substances involved in (age <five years) pediatric deaths.<sup>8</sup>

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