

A combination of cetirizine and pseudoephedrine has therapeutic benefits when compared to single drug treatment in allergic rhinitis.

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Source

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Abstract

Antihistamines and nasal decongestants are well-established therapeutics in allergic rhinitis. However, no data are available which directly compare the effect size of the single substances with their combination in a single study including placebo (PLA) treatment.

OBJECTIVE:

The aim of this study was to evaluate the effect of a combination of cetirizine (CET) and pseudoephedrine (PSE) and to compare it to treatment with CET or PSE alone and to PLA during grass pollen allergen challenge in an environmental challenge chamber (ECC).

MATERIAL AND METHODS:

In a randomized, double-blind, placebo-controlled, four-way crossover study the effect of a combination of 10 mg CET with 120 mg PSE (CET + PSE) versus CET or PSE alone or PLA on symptoms, nasal flow, and nasal secretions was investigated in 49 patients with intermittent allergic rhinitis. Subjects underwent four 6-h pollen exposures in an ECC with administration of the drugs after 2 h.

RESULTS:

The induction of nasal symptoms, nasal secretion and nasal obstruction (measured as nasal flow) during the first 2 h of pollen exposure was highly reproducible at the 4 consecutive exposures. The symptom of nasal obstruction was significantly reduced after treatment with CET + PSE compared to the treatment with CET or PSE alone or PLA ($p < 0.0001$). Furthermore, the combination treatment significantly reduced the total nasal symptom score (TNSS) and visual analogue scale score (VAS) compared to the single treatments or PLA. Nasal flow was significantly increased after treatment with CET + PSE and PSE and nasal secretions were significantly reduced by CET + PSE and CET without significant additional improvement of the combination therapy.

CONCLUSION:

The combination treatment with CET and PSE is more effective than treatment with single substances in subjects with allergic rhinitis.