

Decongestant effects of antihistamines: A class effect?

To the Editor:

We read with interest the recent crossover study of 47 patients with seasonal allergic rhinitis (SAR), which showed that 5 mg of desloratadine compared with placebo administered for 7 days in an allergen exposure unit resulted in improved subjective and objective outcomes of nasal obstruction.¹ In the abstract it is stated that “unlike many antihistamines, desloratadine can reduce nasal congestion in patients with SAR,” which infers that this is a unique property of desloratadine.

This assumption is not borne out by the published literature for other antihistamines. For example, in a crossover study of 37 patients with SAR during the grass pollen season, 2 weeks of treatment with 120 mg of fexofenadine once daily produced a significant improvement in domiciliary peak nasal inspiratory flow, amounting to a 9% increase, along with a significant 23% reduction in nasal blockage symptoms compared with placebo.² In another study of 49 patients with SAR during the pollen season, 180 mg of fexofenadine once daily and 5 mg of desloratadine once daily administered for 2 weeks both produced a significant and comparable improvement in domiciliary peak nasal inspiratory flow (8% and 9% increase, respectively), as well as a significant reduction in nasal blockage symptom score (18% and 25% decrease, respectively).³ Finally, in a parallel-group study of 31 patients with perennial allergic rhinitis, compared with placebo, treatment with 120 or 180 mg of fexofenadine once daily produced a significant decrease in the nasal blockage symptom score, which was seen after the first week.⁴

It would therefore appear that fexofenadine, like desloratadine, might exhibit decongestant effects on subjective and objective outcomes in patients with allergic rhinitis, which in turn suggests that this property is a class effect of antihistamines.

Brian J. Lipworth, FRCP
Daniel K. C. Lee, MRCP
Catherine M. Jackson, MRCP
Asthma and Allergy Research Group
Ninewells University Hospital
Dundee, DD1 9SY
Scotland, United Kingdom

REFERENCES

1. Horak F, Stubner UP, Ziegelmayer R, Harris AG. Effect of desloratadine versus placebo on nasal airflow and subjective measures of nasal obstruction in subjects with grass pollen-induced allergic rhinitis in an allergen-exposure unit. *J Allergy Clin Immunol* 2002;109:956-61.
2. Wilson AM, Orr LC, Coutie WJ, Sims EJ, Lipworth BJ. A comparison of once daily fexofenadine versus the combination of montelukast plus loratadine on domiciliary nasal peak flow and symptoms in seasonal allergic rhinitis. *Clin Exp Allergy* 2002;32:126-32.
3. Lipworth BJ, Wilson AM, Haggart K, Sims EJ. Differences in in-vitro H1-receptor antagonist potency with fexofenadine and desloratadine do not determine effects of nasal congestion in seasonal allergic rhinitis. *Allergy* 2002;57(suppl 73):10.
4. Ciprandi G, Cosentino C, Milanese M, Mondino C, Canonica GW. Fexofenadine reduces nasal congestion in perennial allergic rhinitis. *Allergy* 2001;56:1068-70.

doi:10.1067/mai.2003.115

Reply

To the Editor:

We are grateful for the opportunity to address the interesting comments made by Dr Lipworth and colleagues¹ regarding our study of the effects of desloratadine and placebo on nasal airflow, nasal congestion symptoms, and other seasonal allergic rhinitis symptoms induced by grass pollen in an allergen exposure unit.² It was not our