How effective are nasal steroids combined with nonsedating antihistamines for seasonal allergic rhinitis?

EVIDENCE-BASED ANSWER For treating seasonal allergic rhinitis, inhaled nasal corticosteroids are superior to nonsedating antihistamines (Grade of recommendation: A, based on a large meta-analysis of randomized controlled trials [RCTs]). Combining nasal steroids and nonsedating antihistamines yields no additional benefits (Grade of recommendation: A, based on several RCTs). Unless patient preference limits their use, nasal steroids should be first-line therapy.

EVIDENCE SUMMARY A meta-analysis of 16 RCTs compared the efficacy of intranasal steroids and oral antihistamines for alleviating nasal, eye, and global allergy symptoms.¹ Intranasal steroids were superior to oral antihistamines for all patient-oriented nasal symptom and global symptom ratings. Eye symptom scores and adverse events were similar in each treatment group.

Several large RCTs have addressed whether combining the 2 classes of drugs would achieve greater symptom control. Only 1 study² found combination therapy to be superior. This RCT compared beclomethasone dipropionate with loratadine or placebo daily in 154 patients.² Total symptom scores were better for the combination group mainly due to improved relief from ocular symptoms.

Fluticasone propionate aqueous nasal spray (FPANS) was evaluated alone and in combination with cetirizine in a multicenter double-blind study of 454 patients.³ The mean symptom scores for nasal and eye symptoms were not significantly different

TABLE

| Drug | Usual adult dosages | Cost per month |
|--------------------------|----------------------|----------------|
| Beclomethasone dipropior | nate | |
| Beconase AQ | 2 sprays/nostril qd | \$44 |
| Vancenase AQ | 2 sprays/nostril qd | \$40 |
| Budesonide | | |
| Rhinocort AQ | 2 sprays/nostril bid | \$48 |
| Flunisolide | | |
| Nasarel | 2 sprays/nostril bid | \$44 |
| Nasalide | 2 sprays/nostril bid | \$46 |
| Fluticasone propionate | | |
| Flonase | 2 sprays/nostril qd | \$53 |
| Mometasone furoate | | |
| Nasonex | 2 sprays/nostril qd | \$56 |
| Triamcinolone acetonide | | |
| Nasacort AQ | 2 sprays/nostril qd | \$56 |

between the 2 groups. A more recent RCT had similar results when comparing FPANS with loratadine and with combined therapy.4 This double-blinded placebo-controlled trial, which included 600 patients, measured patient- and clinician-rated total symptom scores, individual nasal symptom scores, and overall evaluations after 7 and 14 days of therapy. Although the symptom scores for the FPANS group were significantly lower than those in the loratadine and placebo groups, no significant difference in scores was found between the FPANS and combined groups. The results were the same for the quality-of-life questionnaire scores. In an RCT of 106 patients, budesonide nasal spray's efficacy was tested against terfenadine alone and in combination: the nasal steroid alone was more effective than the histamine.5 Combining the 2 drugs yielded no significant improvements.

The newer nasal steroids such as fluticasone may be more effective because of their stronger affinities to glucocorticoid receptors, but no clinical evidence confirms this hypothesis.⁶

RECOMMENDATIONS FROM OTHERS The Joint Task Force on Practice Parameters in Allergy, Asthma, and Immunology recommends second-generation oral antihistamines for first-line therapy, but notes that nasal steroids are the most effective medication class for controlling allergy symptoms.⁷ The task force states that combination drug therapy may be tried. A monograph from the American Academy of Family Physicians notes the lack of consensus guidelines for first-line therapy and recommends that treatment be individualized.⁸ It states that combination therapy may be tried if monotherapy fails.

Camille Andy, MD Moses Cone Family Practice Residency Program Greensboro, North Carolina

> Ann Thering, MLS Family Practice Inquiries Network Columbia, Missouri

Clinical Commentaries by Tsveti Markova, MD, and John W. Tipton, MD, at http://www.FPIN.org.

REFERENCES

- 1. Weiner JM, Abramson MJ, Puy RM. Br Med J 1998; 317:1624-9.
- 2. Drouin MA, Yang WH, Horak F, et al. Allergy 1992; 12(suppl):173.
- 3. Benincasa C, Lloyd RS. Drug Invest 1994; 8:225-33.
- Ratner PH, Van Bavel JH, Martin BG, et al. J Fam Pract 1998; 47:118–25.
- 5. Simpson RJ. Ann Allergy 1994; 73:497–502.
- 6. Lumry J. Allergy Clin Immunol 2000; 105:394. J Allergy Clin Immunol 1999: 104(4 Pt 1):S150–8.
- Dykewicz M, Fineman S. Ann Allergy Asthma Immunol 1998; 81:463–518.
- Diagnosis and Management of Allergic Rhinitis. American Family Physician Monograph no. 3; 2001.