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Second-Generation H_1-Antihistamines for Chronic Spontaneous Urticaria

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Clinical Question

Are second-generation H_1-antihistamines effective for the suppression of chronic spontaneous urticaria?

Evidence-Based Answer

There is good evidence that second-generation H_1-antihistamines are helpful in the short- and intermediate-term suppression of urticaria. Cetirizine (Zyrtec) in a dosage of 10 mg daily is effective at completely suppressing symptoms of chronic spontaneous urticaria (number needed to treat [NNT] = 4).[1] (Strength of Recommendation: A, based on consistent, good-quality patient-oriented evidence.)

Practice Pointers

Chronic spontaneous urticaria affects up to 1% of the general population.[2] The economic burden of chronic spontaneous urticaria in the United States is estimated to be $2.5 billion to $5 billion annually.[3] Second-generation H_1-antihistamines are recommended as the mainstay of treatment for chronic spontaneous urticaria.[4] The authors of this study sought to determine if second-generation H_1-antihistamines are effective for the relief of chronic spontaneous urticaria and whether one agent is superior to others. Further, they sought to determine optimal dosing regimens, whether duration of benefits can be predicted, and the risks associated with use of these medications.

This Cochrane review included 73 studies with 9,759 participants.[1] Methodologic quality of the included studies varied; only 12 were judged to be adequately randomized, and 55 of the studies were thought to be subject to potential bias from baseline group imbalances or industry sponsorship. Cetirizine in a dosage of 10 mg once daily led to complete suppression of urticaria in more participants in the short and intermediate term compared with placebo (absolute risk reduction [ARR] = 23%; 95% confidence interval [CI], 7% to 52%; NNT = 4 [95% CI, 2 to 14]). A pooled analysis of loratadine (Claritin; 10 mg) vs. placebo found no difference in relief between the two groups, and another comparison found no significant difference between loratadine, 10 mg, and cetirizine, 10 mg, in providing relief. There was also no difference between fexofenadine (Allegra; 180 mg) and placebo in complete suppression of symptoms. One study of 116 patients in India demonstrated that cetirizine, 10 mg, was more effective in providing complete suppression of chronic spontaneous urticaria than fexofenadine, 180 mg (ARR = 42%; $P < .001$). Among the other studies in the review, there were no significant differences in symptom relief when the first-generation H_1-antihistamine hydroxyzine was compared with cetirizine or loratadine.

When compared with placebo, 5-mg levocetirizine (Xyzal), which is pharmacologically equivalent to 10-mg cetirizine, was effective for complete suppression of urticaria in the intermediate term (risk ratio = 53; 95% CI, 3.3 to 844), but not in the short term; however, the 20-mg dose of levocetirizine is effective in the short term (risk ratio = 21; 95% CI, 1.4 to 318). Rates of medication cessation because of adverse effects did not differ between the patients taking second-generation H_1-antihistamines and those taking placebo, nor among those using the different kinds of second-generation H_1-antihistamines. The overall quality of the evidence was considered low based on the limited number of small studies.

Practice parameters that were endorsed by the American Academy of Allergy, Asthma

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and Immunology and the American College of Allergy, Asthma and Immunology recommend that physicians perform a thorough history and physical examination in patients with chronic urticaria to determine if an underlying cause exists. In patients without a secondary cause, a stepwise approach to management with trigger avoidance and second-generation H_1-antihistamines is the mainstay of therapy.[4] For those not responding to standard doses of second-generation H_1-antihistamines, higher doses may be tried.[4] European guidelines also recommend second-generation H_1-antihistamines as first-line therapy.[5]

The practice recommendations in this activity are available at http://summaries.cochrane.org/CD006137.

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