

High Dose Cetirizine: A Case Report

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We report the case of a 46-year-old man who tolerated 50 mg per day of cetirizine for the treatment of chronic idiopathic urticaria. The patient denied any sedation or somnolence and had no difficulty performing routine daily functions including driving. He had tried other antihistamines, including fexofenadine, loratadine, and hydroxyzine without improvement.

Case Report

A 46-year-old man presented with a 4-week history of generalized urticaria without angioedema. The wheals were not temporally related to foods, exercise, cold exposure, pressure, sun exposure, vibrations, medications, or precipitating infection. The patient's medical history was significant for essential hypertension and acne, and there was no family history of atopy. His medications included valsartan and doxycycline. The patient was unwilling to change or discontinue use of these medications.

Results of the initial physical examination revealed scattered urticaria on the patient's hands, arms, and back. Laboratory results were normal for serum complement levels, prostate-specific antigen level, erythrocyte sedimentation rate, thyroid function, liver enzyme levels, leukocyte counts, hemoglobin level, and platelet count. There was no evidence of cryoglobulins, ANA antibodies, antithyroid antibodies, hepatitis antibodies, or human immunodeficiency virus.

Initially, cetirizine was started at the recommended adult dose of 10 mg per day but was increased to 20 mg per day secondary to refractory urticaria. After 14 days, the patient's symptoms persisted. Subsequently, ranitidine (150 mg twice a day) was added, and cetirizine was increased to 30 mg per day. Following these medication changes, the patient's symptoms decreased partially. Cetirizine was increased to 40 mg per day, and montelukast (10 mg per day) was added. Subsequently, the pruritus was nearly controlled. Because the patient felt that the montelukast did not add to his symptom control, he discontinued its use but occasionally took an extra 10 mg of cetirizine for breakthrough episodes of wheals. In addition, on 2 separate occasions, limited tapered doses of oral prednisone were administered to the patient for outbreaks secondary to presumed viral infections.

At each of the follow-up visits, the patient denied any sedation or excessive sleepiness, and he was avoiding alcohol. Frequent monitoring of liver function enzymes has produced normal results, and the patient continues to be free of urticaria after more than 12 months on 40 mg of cetirizine.

Cetirizine is the active carboxylic acid metabolite of the first-generation H₁ antihistamine hydroxyzine¹ and therefore retains its sedative properties to an extent. In one study,² cetirizine, administered at doses greater than 20 mg, produced a higher incidence of drowsiness than placebo. Our patient is unique in that he is tolerating up to 5 times the recommended adult dose of cetirizine without any subjective evidence of sedation.

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