

Combination of Quetiapine Immediate Release and XR for H₁-Antihistamine-Refractory Chronic Spontaneous Urticaria Comorbid With Depressive Disorder: A Case Report

To the Editor:

H₁-antihistamine-refractory chronic spontaneous urticaria (H1AR-CSU) is defined as hive-related skin symptoms for more than 6 months without a specific trigger and with poor treatment response to adequate dose of H₁-antihistamine.¹ A nation-wide study revealed that patients with H1AR-CSU had a poor quality of life, relied heavily on health care resources, and were associated with high comorbid disease, such as 9.5% of such patients experiencing depressive disorder.² The psychiatric problems would also alternately deteriorate the dermatological disease.³ Clinically, what treatment could be initiated if a patient displayed H1AR-CSU comorbid with depression?

A 42-year-old divorced man, a taxi driver, developed pruritic, elevated, and red wheals or skin lesions over his trunk and limbs for 2 months in his mid-thirties. The skin condition relapsed frequently, and he received oral fexofenadine (a nonsedative H₁-antihistamine) 120 mg/d. Despite regular treatment, the skin condition persisted, and no definite allergens were identified. The diagnosis of H1AR-CSU was made. He also took zolpidem daily 20 mg and flunitrazepam 2 mg for insomnia, which developed after H1AR-CSU.

He was referred to the psychiatric outpatient clinic under an impression of psychogenic H1AR-CSU and the related psychiatric presentations. The psychiatric interviewing revealed that the patient had depressed and anxious mood, insomnia, excessive daytime sleepiness, and poor appetite for 5 years. Physical examinations revealed many old scratching scars and new hive-like skin lesions over the trunk and limbs. Mirtazapine 30 mg daily was prescribed, but the side effect of increasing appetite could not be tolerated.

After discussion, the patient refused standard antidepressant selective serotonin reuptake inhibitors, and quetiapine of immediate-release (IR) formula 25 mg was started with gradual titration to 200 mg/d, and the hypnotics were also tapered. Considering the early-morning waking, quetiapine 200 mg was switched to quetiapine

extended release (XR) 300 mg 2 weeks later, and quetiapine IR 100 mg per night was added for his difficulty of sleep initiation. After 2 weeks of a combination of quetiapine IR and XR therapy, the patient reported substantially improvement of mood, insomnia, and daytime fatigue. Meanwhile, he delightedly reported that he had significantly decreased daytime itchiness and no new skin lesions developed. He discontinued fexofenadine and was maintained on quetiapine 100 mg IR and 300 mg XR per night in the subsequent 18 months. He still had stable mood, sleeping, and skin conditions.

Although the definite pathophysiology of H1AR-CSU remains unclear, the autoimmune-mediated chronic inflammatory process had been mostly reported.¹ A study on the pathophysiological mechanisms of sustaining allergic inflammation reported that fexofenadine only reduced proinflammatory cytokines interleukin (IL)-6 and tumor necrosis factor- α but not IL-1 and clinical symptoms, implying limited immunomodulation of fexofenadine.⁴ However, another study reported that quetiapine can moderate sustaining inflammation status by inhibiting proinflammatory cytokines, such as IL-17, IL-6, and IL-1 β , increasing immunosuppressive factors, such as tumor growth factor- β and IL-10, and ameliorating clinical inflammatory symptoms.⁵ This suggests that quetiapine may have more potent immunomodulatory properties than fexofenadine in chronic inflammatory process.

Quetiapine XR once-daily could maintain daytime minimum plasma concentration with less sedative effects compared with its IR formulation given twice daily.⁶ Moreover, quetiapine XR monotherapy may improve symptoms of anxious depression.⁷ Quetiapine IR, the elimination half-life of which is approximately 5–6 hours, increases maximum plasma concentration during the initial 2 hours after administration, leading to quick sleep initiation.⁶

Taking together, we suggested that a combination of quetiapine IR and XR could be beneficial for patients with H1AR-CSU with anxious depression and insomnia.

Our case provides clinicians with a potential treatment strategy, and further studies can be considered to validate our findings.

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