





# The Dramatic Response to Antidepressants Alone in Severe Cholinergic Urticaria Resistant to Antihistamines and Omalizumab

## Antihistaminiklere ve Omalizumaba Dirençli Şiddetli Kolinergic Ürtikerde Tek Başına Antidepresanlara Verilen Dramatik Yanıt

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### DEAR EDITOR;

Cholinergic urticaria (ChoIU) is a type of chronic urticaria characterized by pinpoint-sized wheals that are induced by exercising, body temperature rise, spicy foods, or psychological stress. Cholinergic urticaria typically begins in the third or fourth decade. One of the possible pathogenetic mechanisms of ChoIU is increased stimulation of the cholinergic nervous system (1). Omalizumab is a recombinant, humanized, a monoclonal antibody against human immunoglobulin E (IgE), approved for chronic urticaria. Omalizumab has been shown that is safe and very effective in patients with ChoIU (2).

A 22-year-old male presented with a pinpoint-sized rash accompanied by a severe stinging sensation that occurred after exercise or a hot bath. The rashes lasted 1-2 hours and disappeared by themselves, but the occurrence of the lesions after every exercise and feeling of excitement made the patient nervous and anxious. The medical history of the patient revealed that these lesions have recurred every day for the past one year. Although he took various antihistamine pills and steroids in high doses, he could not improve. Then, the patient received 300 mg omalizumab per month for 6 months, following a negative wide skin allergy test result. The patient, whose serum total IgE level was very high, surprisingly did not respond at all to Omalizumab treatment. The patient has had suicidal ideas as there was no response to the treatment. In fact, he had never needed a psychiatrist so far. The patient was then referred to take a psychiatric examination. The urticarial episodes of the patient gradually decreased and disappeared within a month after the initiation of sertraline and trazodone. He is still under control with these medications.



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Patients with cholinergic urticaria are usually treated with various dosing antihistamines. A minor group that has no response to antihistamines needs to use other treatments mostly systemic steroids or omalizumab. Currently, omalizumab is considered the first choice of treatment for chronic urticaria cases who do not respond to high-dose second-generation antihistamines (3).

Sertraline is a widely used serotonin reuptake inhibitor that does not have a remarkable antihistamine or anticholinergic effect. However, immunomodulatory effect of sertraline has been demonstrated (4). Moreover, there is a study reporting sertraline corrected the alteration of proinflammatory and anti-inflammatory cytokine molecules (5). Thereby, sertraline might have been effective in regulating the altered possible immune response in patients with urticaria. On the other hand, trazodone exerts antagonistic properties against  $\alpha$ 1- and  $\alpha$ 2-adrenergic receptors and histamine H1 receptors, with minimal anticholinergic effects (6). Although the possibility of spontaneous recovery cannot be ruled out, it is noteworthy that a case of cholinergic urticaria responded rapidly to antidepressants alone, without taking antihistamines.

We would like to emphasize that immunomodulatory and anticholinergic actions of certain drugs including sertraline and trazodone might have beneficial effect on refractory cases with CholU.

**Key words:** Antidepressants, cholinergic urticaria, trazodone

**Anahtar kelimeler:** Antidepresanlar, kolinerjik ürtiker, trazodone

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