

LETTER TO THE EDITOR

Effectiveness and safety of omalizumab in a patient with chronic urticaria and hepatitis C

Editor

Chronic urticaria causes an important impact on patient's quality of life and high direct and indirect health care costs.¹ Hence, an effective treatment is required and management of the disease should be prompt.^{2,3} Numerous factors are thought to cause or aggravate this disease including associated infections. The role of hepatitis virus in chronic urticaria is controversial and its screening does not seem to be cost-effective in low prevalence areas.⁴⁻⁶ Considering its treatment, the first-line therapy is standard doses of non-sedating antihistamines, if it is not sufficient increasing dosage up to four-fold is recommended.^{2,3} If this is not effective and there is an important burden for the patient, more intensive treatment is required. As a third step, the addition of Leukotriene antagonist, cyclosporine or omalizumab are recommended.³ Short courses of oral steroids can be tried for exacerbations. Omalizumab is a recombinant humanized IgG monoclonal antibody that selectively binds to free human immunoglobulin E approved for moderate-severe allergic asthma. It provides rapid and effective treatment in patients with chronic urticaria refractory to other conventional treatments.⁷⁻⁹

We report the case of a 49-year-old woman, with personal antecedent of asymptomatic sexually transmitted hepatitis C virus (HCV) infection that was treated with 180 mcg weekly subcutaneous pegylated interferon alpha-2A and 400 mg daily oral ribavirin during 6 months with a negative viral load at the end of the therapy. Three years later, she was referred to our clinic due to the appearance of wheals and angio-oedema coinciding with HCV reactivation (viral load: 59590 IU/mL). She was diagnosed with urticaria and treated with increasing doses of non-sedating antihistamines. A blood test including CRP, ESR, blood differential, tryptase, thyroid function and antinuclear antibodies, HBV, HAV was normal. After 5 months of treatment with desloratadine 5 mg up to four tablets per day, there was no response with the apparition of wheals daily and increasing episodes of angio-oedema causing a negative impact on her quality of life. She was admitted to the emergency room in numerous occasions and 5-day oral steroids were required more than once monthly to relief the symptoms. Montelukast was added without response. Considering patient's poor response to treatment and negative outcome, intensive treatment was necessary. As she suffered from an active HCV infection,

immunosuppressants were not an appropriate therapeutic option. Omalizumab 150 mg subcutaneous injection every 2 weeks was started combined with desloratadine 5 mg twice daily with very good clinical response from the first dose. Wheals 2 or 3 days before injection were noted and steroids were required in two occasions so the dose was increased to 300 mg with the same application interval. In the following 8 months of omalizumab treatment a dramatic improvement in urticaria and patient's quality of life was achieved with no side-effects or HCV infection worsening. There were neither emergency admissions nor oral steroid administration after increasing the dosage of omalizumab.

The role of HCV infection in chronic urticaria remains unclear. In our case, considering the temporal relationship, chronic urticaria has probably been triggered or caused by HCV reactivation. Unfortunately, we cannot establish urticaria's response to HCV treatment that could have oriented us towards HCV as a causative agent or as a trigger solely.

Omalizumab has proved to be a very effective and safe treatment in our patient. To our knowledge, this is the first report suggesting safety and effectiveness of omalizumab in chronic urticaria and HCV infection. Antonicelli *et al.* reported the case of a patient with HCV infection and severe persistent allergic asthma successfully treated with omalizumab without side-effects after 19 months of follow-up.¹⁰ The comorbidity with HCV infection does not seem to diminish efficacy of omalizumab as in the case we describe.

There is no theoretical or confirmed data to suspect adverse effects or HCV reactivation or exacerbation risk during omalizumab treatment, therefore we consider that it is a good therapeutic option in cases with HCV infection and severe resistant chronic urticaria.

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