



Treating Chronic Urticaria with Immune Globulin Therapy

By Dean Mitchell, MD



Urticarial lesions appear as raised, well-circumscribed areas of erythema (redness) and edema (swelling) involving the dermis and epidermis that are very itchy.

URTICARIA (from the Latin word meaning to burn or hives) is a kind of skin rash notable for dark red, raised, itchy bumps that affects 15 percent to 20 percent of the population once or more during a lifetime. However, in approximately 30 percent of patients, urticaria attacks often recur for months or years. Chronic urticaria is defined by recurrent

episodes occurring at least twice a week for six weeks. Females are more commonly affected than males.¹

Most allergists and dermatologists who see many cases of chronic urticaria would describe it as “easy to diagnose but difficult to treat.” For many years, chronic urticaria was considered a dermatologic disease with an occult (hidden) or idiopathic

(unknown) etiology. The occult causes ranged from food allergies, food additives or chemical preservatives; chronic infections (dental or sinus more commonly); endocrine disorders (mainly hypothyroidism); or neurogenic (arising from the nerves or nervous system). However, in more than 90 percent of chronic urticaria cases, no underlying cause was determined (excluding physical urticarias from pressure, cold, heat and aquagenic), which led to changing the terminology to chronic idiopathic urticaria.

Chronic idiopathic urticaria has been an especially difficult disease to treat since the first- and second-line treatments, nonsedating antihistamines and higher doses of antihistamines, respectively, are in many cases ineffective. And, the addition of oral corticosteroids, while effective, has too many acute and chronic side effects to be a viable long-term treatment option.

In the mid-1990s, the discovery of serum IgG autoantibodies against the alpha chain of the Fc epsilon receptor changed the belief that chronic urticaria was an allergic disease but, instead, an autoimmune disease.² This autoantibody discovery was present in about one-third of patients. Indeed, a single case report in a patient with common variable immunodeficiency whose chronic urticaria ameliorated when treated with intravenous immune globulin (IVIg) may have opened the door to IG as a treatment for chronic urticaria.³



IG: A Third-Line Treatment

Immune-modulating treatments have become the third line of treatment for chronic urticaria, and research has shown both high-dose and low-dose IVIG are effective.

Since specific cases of chronic urticaria are autoimmune disease, rather than immune deficiency, it is reasonable to believe low-dose IVIG can be sufficient and as effective as high-dose IVIG. The main goal of autoimmune treatment is to dampen the immune response, rather than maintain serum immunoglobulin levels. As an allergist/immunologist, I have found GamaSTAN S/D given intramuscularly has been effective in many cases. Similar to subcutaneous administration of IG, the use of an intramuscular preparation has fewer side effects (headaches, thrombosis, aseptic meningitis) than IVIG. In addition, its cost is significantly lower than IVIG products.^{4,5,6}

immunization with GamaSTAN S/D modifies hepatitis A and prevents or modifies measles. It is also an option for varicella (chickenpox) in an immunocompromised patient if varicella-zoster IG is unavailable. GamaSTAN S/D should not be given to persons with an IgA deficiency, thrombocytopenia or any coagulation disorder that would contraindicate intramuscular injections.⁷

Omalizumab: A New Option for Chronic Urticaria

In 2015, the U.S. Food and Drug Administration (FDA) approved omalizumab (XOLAIR) to treat chronic idiopathic urticaria (it was originally approved for moderate to severe asthma). Omalizumab is a recombinant humanized anti-IgE antibody directed against the Fc IgE receptor on basophils and mast cells (central effector cells in allergic inflammation and innate and adaptive

injections.⁸ In the randomized double, placebo-controlled ASTERIA II study, doses of 150 mg and 300 mg of omalizumab were found to be effective in 33.7 percent of patients treated with the drug versus 4 percent of those treated with a placebo.⁹

GammaSTAN S/D More Effective and Well-Tolerated

While GamaSTAN S/D is not approved by FDA for chronic urticaria, it can be used off-label in appropriate chronic idiopathic urticaria patients who have not responded to antihistamines, oral corticosteroids or omalizumab. In my practice over the past 10 years, I have used both omalizumab and GamaSTAN S/D, and have found the latter to be more effective and well-tolerated by patients. ■

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GamaSTAN S/D is a human IG treated with solvent/detergent for intramuscular administration in either the upper lateral thigh or the deltoid muscle in the upper arm. Passive

immunity). The benefit of omalizumab to patients is that the course of treatment is typically one or two injections. The concern, however, is patients have developed anaphylaxis after the

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