

Rituximab as Treatment of Chronic Idiopathic Urticaria

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Introduction

Conventional treatment of chronic spontaneous urticaria (CSU) typically involves high doses of second generation H1-antihistamines followed by omalizumab in refractory cases. Many patients do not achieve resolution of symptoms despite trialing multiple therapies. The following case series describes three cases of CSU refractory to many of the prior mentioned therapies that were successfully treated with rituximab.

Cases

The first patient is a 43 year-old woman with psoriatic arthritis and autoimmune thyroiditis who presented to us with CSU. She had elevated levels of anti-IgE receptor antibodies with levels greater than maximum level of detection. She was unresponsive to antihistamines, cyclosporine, prednisone, dapson, mycophenolate mofetil, hydroxychloroquine, and omalizumab and trialed on rituximab with resolution of urticaria.

Our second patient is a 49 year-old woman with multiple sclerosis who was referred with humoral immunodeficiency. She was diagnosed with common variable immune deficiency and started on immune globulin therapy. She also had generalized urticaria refractory to antihistamines which responded to rituximab later, incidentally started by her neurologist (for a flare of her multiple sclerosis).

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Our third patient is a 48 year-old woman with asthma who presented with complaints of urticaria refractory to antihistamines and high doses of steroids (prednisone 20mg BID). She was started on rituximab with resolution of her urticaria after the second infusion.

Discussion

Rituximab is a chimeric murine/human anti-CD20 monoclonal antibody approved for use in many autoimmune and hematologic disorders. CD20 is present in high levels on B cells; by targeting these cells that in turn produce IgE & IgG autoantibodies against FcεRI, it is postulated that better control of chronic urticaria may be obtained. Use of rituximab in treatment of chronic idiopathic urticaria is not well documented in literature today and should be entertained as possible therapy for cases of treatment-resistant chronic urticaria, especially in the setting of other autoimmune conditions.

References

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