

Rituximab as Treatment of Chronic Idiopathic Urticaria

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DESCRIPTION

Conventional treatment of chronic idiopathic urticaria typically involves high doses of second generation H1-antihistamines followed by omalizumab in refractory cases. Up to 50% of patients will not respond to maximal (four times the conventional dose) doses of second generation H1-antihistamines. Many patients who do not achieve resolution of symptoms despite trialing multiple therapies including antihistamines, omalizumab, and immunosuppressive therapy with cyclosporine, steroids, leukotriene receptor antagonists, doxepin, dapsone, hydroxychloroquine, methotrexate, mycophenolate mofetil, azathioprine, and/or IVIG. The following case series describes three cases of chronic idiopathic urticaria refractory to many of the prior mentioned therapies that were successfully treated with rituximab.

EDUCATIONAL OBJECTIVE

Upon completion of this discussion, participants should have a more complete understanding of management options for treatment resistant chronic idiopathic urticaria as well as the efficacy of rituximab when used for such treatment

CASES

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

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

Our third patient is a 48 year-old woman with hypertension and asthma who presented to us with complaints of long-standing urticaria refractory to antihistamines and high doses of steroids (prednisone 20mg BID). She was started on rituximab with subsequent 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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