



Coastline near Cambria, CA

PIC QUESTION OF THE WEEK: 3/08/10

Q: Please describe the disorder known as *chronic urticaria* and how is it treated?

A: *Chronic urticaria* is a specific type of urticaria that persists for more than 6 weeks. In some patients, it may extend for years. It is characterized by hives or lesions that present as reddish, pruritic wheals. In many patients, the condition is accompanied by angioedema. Although factors such as cold, cholinergic stimuli, dermal pressure (dermatographism), etc. may result in urticaria, the exact trigger for most cases of this chronic condition is unknown. In many patients, an autoimmune reaction is now thought to be responsible for the disorder. IgE typically binds to specific (FcεRI) receptors located on mast cells and basophils. Activation of the receptors is accompanied by the release of histamine resulting in fluid accumulation, vasodilation, etc. In patients with chronic urticaria, alteration of the IgE receptor may result in production of IgG auto-antibodies directed against IgE receptor sites or bound IgE antibody. This contributes to release of histamine from mast cells, primarily those located in the skin. In addition, alteration of receptor signaling may result in spontaneous release of histamine from circulating basophils. Evaluation of patients with chronic urticaria includes response to physical challenge (e.g. heat, light, cold, pressure, etc.), skin testing, and identification of autoantibody and serum histamine releasing factors. Management of the disorder is also dependent on patient history and identification of specific triggers. The goal of therapy is symptom relief and improvement in the patient's quality of life. Initial treatment generally consists of an H₁-receptor antagonist such as diphenhydramine or hydroxyzine. Less sedating agents such as loratadine and fexofenadine are considered preferable to the first generation antihistamines. An H₂- antagonist can be added if symptoms are not relieved by an H₁- receptor blocker. Subsequent treatment options include doxepin and leukotriene receptor antagonists such as montelukast. Oral corticosteroids may be considered when these options fail. Immunosuppressive agents such as cyclosporine, omalizumab, and methotrexate as well as a variety of other compounds (e.g. colchicine, antimalarials, terbutaline, etc.) have been utilized in refractory cases. Fortunately, most patients with chronic urticaria can be managed with only a histamine antagonist. In some cases, chronic urticaria may be a severe disorder that greatly affects the quality of life despite available medications.

References

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Colleen P. Hall and Jennifer L. McNeill, Pharm.D. Candidates

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