
URTICARIA (HIVES) AND ANGIOEDEMA

Definition

Urticaria, also known as hives, is one of the most common dermatologic conditions seen in a clinical practice. Up to 22% of the population will experience either acute or chronic urticaria at least once in their lifetime. Broadly speaking, urticaria is defined by its duration. Hives lasting less than 6 weeks is acute while a longer duration is termed chronic. From an etiologic (cause) classification, there is spontaneous urticaria (which is usually idiopathic), physical urticaria (such as cold-induced, heat-induced, pressure-induced, exercise-induced, etc.), and other urticarial disorders (drug induced urticaria, contact urticaria, and urticarial vasculitis). Unfortunately, the reality is that the vast majority of urticaria remains idiopathic. That is, physicians end up never finding the cause.

Angioedema is inflammation of the deep dermis or submucosa. It seems to resemble a deeper form of urticaria. It can be life threatening if it involves the airway. It can be congenital, idiopathic, or drug induced. Ace inhibitor blood pressure medications are common offenders causing this condition. Food allergies are another big culprit. A thorough allergy history and testing are paramount. Exciting new drugs are on the horizon for this condition.

Diagnosis

There is nothing more important than a thorough history and physical exam to make the diagnosis. Acquired or hereditary angioedema do not typically respond to antihistamines or steroids, so the fact that one got better with these medications argues against this. Also, Hereditary Angioedema does not Urticate (No Hives).

A formal allergy blood test with attention to both inhalants and ingestants, should always be considered.

A comprehensive laboratory blood test includes: C2, C3, C4, C1q, and C1-INH level and function, ESR, CRP, BUN, Cr, ANA, RF, Liver Panel including hepatic transaminases, TSH, Free T4, Free T3, anti-thyroglobulin antibodies, anti-thyroid peroxidase (TPO) antibodies, CBC/diff and CU index, Total IgE, Allergen Specific IgE.

If the hives last longer than expected or look atypical, a skin biopsy could be considered to rule out a vasculitic etiology. Interestingly, thyroid dysfunction correlates with hives and adjunctive Synthroid often helps in its resolution.

Treatment

Treatment of course involves an attempt at discovering and eliminating any etiologies such as ace inhibitors, aspirin, NSAIDS, beta blockers, alcohol or foods. Identifying and modifying any behavioral causes is also paramount. Beyond that, we mitigate things pharmacologically. Type 1 and 2 antihistamines are standard. 85% of the histamine receptors in the skin are H1 while 15% are H2. I typically prescribe Zyrtec and Zantac for 6 months. Doxepin is a tricyclic antidepressant with both H1 and H2 activity and is often a reasonable choice for patients. Adding a leukotriene inhibitor (Singulair) and necessary steroids is always considered.

Steroids are helpful, however, we need to be aware of rebound inflammation when ending the therapy. Beyond that, alternative chemotherapeutic options such as cyclosporine, methotrexate, dapsone, and sulfasalazine exist. Topical therapies have very little role and novel agents such as Xolair and Tacrolimus have some problems. If we do identify a defect or deficiency consistent with a hereditary cause there are new medications such as Cinryze on the horizon. Things of course are always changing and we will always keep up on what is emerging.