The Seven Year Itch

One of the biggest reasons people see an allergist is for hives, those itchy, red bumps that cause great distress and for which people desperately seek a cause. Hives are divided roughly into two groups: *acute* and *chronic.* Acute hives are usually self limited, lasting a few days or a week or so, and often are seen in the context of a drug reaction, cold or flu, or possibly food. But more pesky are hives that are chronic which are present on most days of the week for a period of six weeks or longer. At any given time, 1% of our population have chronic hives, and about 40% of these have accompanying swellings typically affecting the lips, cheeks, eyes, extremities, etc. This form of hives is more common in adults, women over men by a margin of two to one, and typically comes on during ages 20-50. Even more concerning is that no external cause can be found in 80-90% of adults and children who have chronic hives! That is, in only 1 or 2 out of 10 will one find a cause!

Discovery of the cause of hives (in that small population where you find a cause) begins with the history. How long do individual hives last? Is there a residual "bruise" other than that caused by scratching? Has there been a new drug, recent travel, infections, allergic conditions? Have other symptoms such as fever, weight loss, joint paints, cold or heat sensitivity, abdominal pain been present? What seems to aggravate the hives, and what do they respond to? Laboratory studies and biopsies of the lesions have an important, but limited role to play in discovering the cause. Such tests are best obtained based on the history and skin findings, and might include tests for allergies, systemic inflammation, autoimmune disorders, thyroid disease, infections, or even rarely malignancy. Biopsies are limited to those whose individual lesions persist beyond 24 hours, are painful, bruise, or who have certain laboratory features.

One of the interesting findings in patients with chronic hives has been the presence of antibodies against the thyroid in 12-30%. While these patients almost always have normal circulating levels of thyroid hormone, some studies have found that these antibodies which are attacking specific thyroid proteins may cross-react with proteins found on the surface of histamine-containing MAST cells in the skin. When these anti-thyroid antibodies attack MAST cells, it may lead to disruption of cell integrity and spillage of histamine into the surrounding skin tissue leading to hives and swelling. Other investigators have found other proteins circulating in the blood of patients with chronic hives that when re-injected into the skin cause local hives to form, although such proteins may be found in normal people as well. Further, while up to 50% of adults with chronic hives feel their reactions are caused by foods, only 10% of these individuals demonstrate signs or symptoms when incriminated foods are given by hidden oral challenge. Food additives are rarely, if ever, confirmed to cause or contribute to flares of chronic hives in carefully done studies.

What can I expect if I get chronic hives? In most patients, chronic hives are episodic and self-limited. The average duration of disease is 2 to 5 years. In patients where there is no trigger identified, 30-50% spontaneously resolve at one year, but 20% of patients have hives that persist beyond 5 years. The duration seems to correlate with severity of symptoms.

What treatments are available? First, patient education is essential. Patients should be reassured: it is rarely permanent, almost 50% resolve in one year, and chronic hives rarely put them at any acute, serious risk. Avoidance of factors that trigger (not cause) hives is helpful, and may include physical stimuli such as heat (hot showers, extreme humidity), sun, cold, and tight clothing. Dietary manipulations are not generally helpful, but foods the patient feels bother them should be limited if reasonable. Medications are a mainstay of therapy, often in escalating step-wise fashion. Most patients are treated with antihistamines often in concert with other classes of medications. The reason it often takes more than one medication is that these medications block the effects of histamine and other mediators that are released from the skin in chronic hives. These medications include newer generation antihistamines (cetirizine, fexofenadine, loratadine) which are much better tolerated than older antihistamines (hydroxyzine, diphenhydramine, chlorpheniramine). Dosing is often higher (double or more) than that routinely used for inhalant allergies. If not controlled, additional agents may be added, including other histamine blockers, agents that block leukotrienes, and oral corticosteroids. If symptoms are still not controlled, other agents such as thyroid hormone to suppress thyroid activity in those with thyroid antibody, anti-inflammatory medications and immunosuppressants may all be used. Many patients require multiple medications, reducing from time to time to see if their problem has resolved.

UP-TO-DATE, a medical publication, has provided additional patient information that may be shared, and two helpful articles are "Hives (The Basics)" and "Hives (urticaria)".