

# ALLERGY, ASTHMA & SINUS CENTER P.C.

BEHNAM DAGHIGH, M.D.    HUONG THAI-KEMPROWSKI, M.D.    KUNAL SHAH, M.D.    JILL HAM, N.P.  
*Diplomate American Board of Allergy & Immunology*

---

19465 Deerfield Avenue, Suite 101 ♦ Leesburg, VA 20176 ♦ 703-726-9720 ♦ Fax 703-726-9721  
205 E. Hirst Road, Suite 202 ♦ Purcellville, VA 20132 ♦ 540-338-1215 ♦ Fax 703-726-9721  
46169 West Lake Drive, Suite 140 ♦ Sterling, VA 20165 ♦ 703-444-8592 ♦ Fax 703-726-9721

## Urticaria (Hives) and Angioedema

### **What are hives?**

Hives are itchy pink or pale swellings that appear as welts, and can occur on any part of the skin. Each individual hive typically lasts minutes to hours before fading away, leaving without a mark. New hives can arise as old ones fade away. They can vary in size from a few millimeters to inches, and can blend together to form larger swellings.

Hives result from blood plasma leaking through small gaps between the cells lining small blood vessels in the skin. Histamine is a natural chemical released from allergy cells, which lie along the blood vessels in the skin. Histamine causes the itching, swelling, and red color of hives.

### **How common are hives? What are the most common causes?**

Hives are very common, and approximately 15-25% of the population will have an episode in their lifetime. They typically go away within a few days to weeks, but occasionally can continue for years. Most of these cases are short lasting (acute or less than 6 weeks).

Acute urticaria are hives that last less than 6 weeks. Typically in these cases, the cause may be identified. The most common causes of acute hives are foods, over the counter vitamins and supplements, prescription medications, or infections. Viral infections including the common cold, Strep throat, mononucleosis, and hepatitis are common causes of acute hives. Other causes include insect stings. Factors that can worsen hives include scratching, alcohol, exercise, stress, and non-steroidal anti-inflammatory drugs (NSAIDs) like Ibuprofen.

Chronic hives are those that last or recur more than 6 weeks and occur in 30% of patients. Chronic urticaria occurs more often in adults and affects women (75%) more than men. Chronic urticaria has been further divided into allergic (IgE-mediated) urticaria in 1% to 5% of patients, physical urticaria in 20% of patients, and the overwhelming majority i.e. 75-80% are called chronic idiopathic urticaria or CIU (of unknown cause). In 30-60% of the idiopathic or CIU patients, studies have shown evidence of autoimmunity. The patient's immune system may produce proteins or antibodies against their own allergy cells.

Allergies are not a common cause of chronic hives but environmental exposures can be considered if symptoms of hay fever or asthma occur with hives. Blood work may be performed to look for systemic diseases such as autoimmune and endocrine disorders that can be associated with chronic hives.

### **What is angioedema?**

Angioedema is a deeper swelling underneath the skin, that usually affects the eyelids, lips, or tongue and rarely occurs in the gut or genitals. Approximately 40% of patients with hives also have angioedema. In a smaller number, approximately 10%, angioedema is present without hives. Sometimes it may be life-threatening if swelling occurs in the throat or if it accompanies trouble breathing. Hereditary angioedema should be considered if there is a family history and blood work can identify a protein deficiency in these inherited cases.

### **What are other types and causes of hives?**

Physical stimuli can also cause hives. These can include changes in temperature such as rewarming after being in the cold, or due to pressure or sunlight. Cholinergic urticaria are tiny millimeter-size itchy bumps that can arise from anything that raises the skin temperature such as sweating, sunlight, hot baths, blushing, and anger. Dermatographism is the most common type of physically induced hives, that result minutes after stroking or scratching the skin. Inflammation of the blood vessels, or vasculitis, may also cause hives. These are usually lasting more than 24 hours, painful more than itchy, and may leave a bruise on the skin.

### **How do we find out the cause of the hives?**

In some cases, the cause is obvious, such as immediately after ingestion of a food, medication or after an insect sting. A single episode of hives does not require extensive testing. If it recurs, patients can share a detailed history with their doctor and look for patterns. This will include consideration of exposures and contacts at work and at home, and review of current and recent medications. If food allergy is suspected, a diary of foods eaten a few hours before the hives, may be helpful. Sometimes skin testing or blood work is needed. Chronic hives can be frustrating for both the patient and doctor; however it is usually controlled through medications.

### **How are hives treated?**

If the cause of hives is identified, then it is necessary to avoid triggers. Triggers to avoid may include avoidance of a specific food or medication, scratching, irritants in harsh soaps, tight clothing to relieve pressure, frequent bathing that can dry skin and cause further itching, and changes in temperature if temperature is the trigger.

The primary medications used to treat hives are antihistamines. Low sedating or non-sedating antihistamines are preferred as they are effective, long lasting and with few side effects. It is not uncommon to require a combination of more than one antihistamine. In frequent, chronic or recurrent hives, daily use of antihistamines is preferred for prevention rather than waiting until a break out. Severe episodes may require oral steroid treatment, but these are better for temporary use since there are increased risks of side effects with prolonged or recurrent use. Sometimes in cases of difficult to treat hives, immunomodulators, or medications that suppress or change part of the immune system, may control the hives and are steroid-sparing. The risks/benefits of the medications can be reviewed with your allergist. In most cases of chronic hives, since the condition is of unknown cause, the treatment consists of controlling the hives with medications until the condition resolves by itself.

### **How long will the hives last?**

In chronic idiopathic urticaria, there is no known cure. In half of people with chronic hives, the hives go away on their own in less than 2 years and the other half can take longer. Avoid the triggers and factors that can worsen the hives such as alcohol and NSAIDs.