



# Urticaria



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## *What Is Urticaria?*

The round, raised, red, itchy rash of hives (urticaria) may occur in up to 20% of the population during their lifetime. Usually, the condition occurs only for a short time period—about 6 weeks. This kind of urticaria is called “acute.” When urticaria lasts for more than 6 weeks, it is considered chronic. The list of potential causes of chronic disease is different from that of acute illness. Chronic urticaria may be difficult to diagnose. Cooperative effort between physician and patient may not reveal the cause in up to 70% of the patients with chronic urticaria. Angioedema may or may not accompany urticaria. Angioedema is characterized by swelling of the skin or mucous membranes such as eyelids and/or lips and is not usually accompanied by itching. Angioedema may lead to more serious consequences such as swelling of the throat that can then obstruct breathing.

## *I. Causes*

The causes of acute urticaria include:

- a. Infection, usually viral, but occasionally strep throat.
- b. Food allergy, especially foods such as nuts, seafood, egg, berries, milk, and melons.
- c. Preservatives or colorings in foods. It has been speculated that yellow and red dyes and benzoates contribute to urticaria. It is known that sulfites and nitrates can cause hives in some patients, but this a rare occurrence.

Acute or chronic urticaria has been associated with the list below. Studies have noted that avoidance of the following foods and compounds may lead to a decrease in the amount of urticaria:

- a. Aspirin and aspirin-like medicines (nonsteroidal anti-inflammatory drugs [NSAIDS], etc.). Without specific challenge tests, it is difficult to determine if a patient is allergic to aspirin or aspirin-related compounds.
- b. Drugs: Antibiotics are a common culprit, but any drug, either prescription or over-the-counter, should be considered as a possible cause of urticaria. Any new chemical in the environment such as latex, rubber, or various dyes may also cause urticaria and must be eliminated, if possible.



- c. Fabric softeners and detergents.
- d. A new residence, place of employment, or a recent change in physical surroundings may explain new urticaria due to potential allergens in the environment and should be critically investigated.
- e. Physical factors such as exposure to light, heat, cold, pressure, or vibratory sensation. Dermographism, or skin writing, is the occurrence of hives after stroking the skin. This may occur in some of the population and may cause generalized hives in a small number of patients.
- f. Systemic diseases: Urticaria is sometimes associated with diseases such as thyroiditis, malignancy, and hepatitis B.
- g. Autoimmune disease may account for some chronic cases of urticaria. Conditions like lupus or autoimmune thyroiditis can cause urticaria. Alternatively, some cases of idiopathic urticaria are actually autoimmune urticaria, caused by the body attacking itself.
- h. Unknown cause (idiopathic): Unfortunately, this is the most common cause of chronic urticaria. After a thorough workup, the cause of urticaria is labeled idiopathic if none of the above associated features can be discerned.

## *II. Investigation*

The diagnostic tests are determined by history and physical examination, but mainly include blood tests and occasionally, a skin biopsy. Routine allergy skin testing is rarely, if ever, helpful.

## *III. Treatment*

The most effective treatment for urticaria is to remove the cause. If food allergies are suspected of causing acute urticaria, a diet without the following foods or additives should be tried: milk, nuts, eggs, seafood, berries, melons, and sulfites. If there is still no change in urticaria, a complete diet diary can be kept to track all substances ingested and any symptoms that appear before the next appointment. However, this approach may not help.

Other forms of treatment using medication may be necessary for some patients.



- a. Antihistamines for acute and chronic disease: Two types of antihistamines are available, called H1 and H2 blockers. A common H1 blocker is Benadryl<sup>®</sup> (diphenhydramine); a common H2 blocker is Tagamet<sup>®</sup> (cimetidine). These may be used alone or in combination to control hives.
- b. Corticosteroids for acute or chronic urticaria: These drugs are used as a short-term intervention to bring flares of urticaria or angioedema under control. If corticosteroids are needed on a long-term basis, the lowest possible dose should be used for the shortest period of time to control the problem. Therapy given every other day may lessen the adverse effects.
- c. Miscellaneous: Other drugs, such as leukotriene inhibitors, colchicine, dapsone, Azulfidine<sup>®</sup> (sulfasalazine), Sandimmune<sup>®</sup> (cyclosporine), and Sinequan<sup>®</sup> (doxepin) may be used to control urticaria.

#### *IV. Outlook*

Most patients stop having hives within 6 weeks. If hives last more than 6 weeks, there is no way to determine how long they will continue. The course is usually measured in months rather than years.