

hives (urticaria) and angioedema

Hives or welts (also known as **urticaria**) are itchy, raised, reddish areas on the skin. About a quarter of people have hives in their life. Hives often show up without warning and at any age.

Angioedema is swelling below the surface of the skin and fatty tissue. Areas of swelling may be painful. Angioedema usually occurs in the:

- Face
- Throat
- Hands
- Feet

Swelling can also occur in the belly area or other areas of the body. Throat swelling can be life-threatening and requires immediate medical attention.

Angioedema (swelling) can be found with many different disorders. It can happen with or without hives. There are several different ways swelling can occur. Understanding the underlying process of swelling or the specific disease is critical in determining the best treatment.

hives and angioedema symptoms and diagnosis

Hives are itchy and can occur anywhere on the body including on the:

- Face
- Hands/feet
- Chest
- Back

Hives can vary in size from just a few millimeters to several centimeters. One hive usually fades within a day. The skin returns to normal without leaving any marks or bruising.

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Doctors will classify your hives based on how long you have had them.

Chronic hives (lasting over six weeks) are not dangerous. Sometimes hives occur with swelling. Usually the cause of chronic hives cannot be identified. Experts have found that allergies are usually not a cause of chronic hives. It can be frustrating when patients cannot find a trigger.

Classifications

Modified from <http://www.urtikaria.net/en/forms-of-urticaria/overview.html>

type of hives	acute	chronic
duration	Spontaneous urticaria, angio-oedema or both for less than six weeks	Spontaneous urticaria, angio-oedema or both for more than six weeks
type of hives	Acute, spontaneous urticaria	Chronic spontaneous urticaria (very common) <hr/> Chronic inducible urticaria (very common)
causes	Often due to: <ul style="list-style-type: none"> • Viral infection • Food/drug allergy • Adverse drug reaction (opioids/NSAIDs) 	Possibly autoimmune <hr/> Physical Urticaria (non-allergic hives from environmental triggers) <ul style="list-style-type: none"> • Scratching/rubbing (dermatographic urticaria) • Pressure/tight clothes (pressure urticaria) • Sweating/increased temperature (cholinergic urticaria) • Cold exposure, ice (cold urticaria) • Swelling from vibration (vibration induced angioedema) • Sunlight (solar urticaria) • Water (aquagenic urticaria)

swelling without hives: a special situation

Talk to your doctor if swelling occurs without hives. This may suggest a special situation that needs to be reviewed by a provider. Sometimes high dose antihistamines (drugs used to treat allergies) may not improve swelling. This is because the cause of swelling may be different than that of hives.

In children, swelling without hives may be due to:

1. Aspirin or nonsteroidal anti-inflammatory drug (NSAIDs), such as ibuprofen
2. Ace inhibitors (a class of blood pressure medications)
 - a. Generic names of these medications end in “pril” such as lisinopril. ACE inhibitors can cause swelling at any time during the course of therapy, even after years of being on the medication.
3. Hereditary angioedema (HAE) is a rare genetic disorder. Patients have a defect in the gene that controls a regulatory blood protein called the C1 inhibitor. When the C1 Inhibitor does not work right, fluids can move out of the blood and into tissues. This causes swelling.
 - a. Antihistamines, corticosteroids and epinephrine will not work to treat swelling in patients with HAE. There are target treatments to use once you’re diagnosed.
 - b. Over 50% of patients with HAE will have their first swelling episode before age 12.

hives and angioedema treatment and management

The goals of the treatment are to:

- Relieve itching
- Make hives better
- Make hives go away

Medications will help with itching and reduce hives. They can also help to completely get rid of them. Antihistamines are the best first medication to treat hives. Sometimes, a combination of several antihistamines or an increased dose of one antihistamine may be recommended.

Older antihistamines (sedating antihistamines) may cause you to feel sleepy or cause dryness, which lasts for several hours. Newer non-sedating antihistamines are less likely to make you sleepy, have fewer side effects, and last longer. Non-sedating antihistamines are usually the first medication doctors prescribe for hives. High dosages, or up to four times the recommended dose, are often well tolerated and can help control itching. This will also help prevent the use of other medications that may have more side effects.

Your doctor will outline a treatment plan that allows you to increase treatment during an outbreak, and reduce medications when the hives or angioedema are not as bad.

Chronic hives can last for years but will often go away. Half of patients have hives go away within one to two years, and most patients will improve within five years. Even if your hives do improve, it is not unusual to see them come back months to years later.

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antihistamines commonly used to treat angioedema

sedating antihistamines	non-sedating antihistamines
hydroxyzine (Atarax)	cetirizine (Zyrtec)
diphenhydramine (Benadryl)	levocetirizine (Xyzal)
	fexofenadine (Allegra)
	loratadine (Claritin)
	desloratadine (Clarinex)

Information adapted from American Academy of Allergy, Asthma and Immunology. This handout is for general information only and should not be considered complete. For more specific information, please ask your child's health care provider.

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