Urticaria and Angioedema

What are urticaria and angioedema?
Urticaria is another term for “hives.” An episode of hives usually begins with itching and then progresses to raised, red, itchy areas on the skin that may come and go for a few minutes to hours. When the hives go away, the skin may continue to be red for a few hours but will shortly go back to normal.

Angioedema is a tense swelling in the deeper layers of the skin that may occur with or without the hives. It is not itchy or red but may be very uncomfortable and usually involves the soft tissues around the eyelids, mouth, or genitals.

About 20% of the population will have an episode of hives or angioedema at some point during their lifetime.

What are the types of Urticaria?
Hives are usually defined by their time course and cause. Acute (short-lived) urticaria episodes occur over six weeks or less. These are most often caused by infections (such as the common cold, Strep throat, or mononucleosis), medications (most commonly non-steroidal anti-inflammatory drugs like ibuprofen and painkillers containing codeine or codeine-like drugs), foods, or insect stings. When urticaria are caused by foods, medications, or insect stings they generally occur within minutes of the exposure and last less than 24 hours.

Chronic (long-lasting) urticaria episodes last for more than 6 weeks. Most chronic cases of hives do not have an easily identified cause (idiopathic urticaria). These involve a variety of immune system mechanisms causing the release of histamine and may be related to infections, autoimmune disease (such as rheumatoid arthritis, diabetes, or specific antibodies to the IgE receptor), thyroid disease, or hormonal imbalances. Some cases of chronic hives involve “physical urticarias” which are caused by exposure to scratching or rubbing (dermatographism), heat (cholinergic urticaria), cold, pressure, sunlight (solar urticaria). There are also forms of pressure and vibrational angioedema.

Is there any testing for urticaria and angioedema?
In most cases of hives, a thorough history and physical examination are the most important factors in determining the type of hives and the treatment course, but depending on the circumstances and the timing of the hives or angioedema, your allergist may use specific tests to help identify the cause. These may include allergy skin testing, blood tests, physical challenge testing (with heat, cold, or pressure), and/or skin biopsy.
How is urticaria treated?
Hives and angioedema result from the release of histamine from the mast cells, in the skin. Once histamine is released and binds to the histamine receptors, itching, redness, and swelling will usually persist for 30 minutes to a few hours. Thus, prevention of histamine release and blocking histamine receptors are the mainstays of treatment.

1) Avoid triggers:
- If your hives are thought to be caused by exposure to specific foods, medications, or insect stings, strict avoidance to these exposures is always the best and safest course of treatment.
- Physical urticarias are best treated by avoiding the specific physical stimulus that causes the hives or angioedema.
- Other triggers are common to all causes of urticaria and should be approached cautiously, especially if the hives have already appeared or have been appearing on a regular basis:
  a. Hot water
  b. Excessive rubbing or scratching
  c. NSAIDs (like ibuprofen, aspirin, naproxen, etc.)
  d. Narcotics (like codeine or other similar pain-killers)

2) Medications:
- **Antihistamines**: Due to their abilities to block histamine receptors, antihistamines (such as Allegra, Zyrtec, Claritin, Benadryl, chlorpheniramine, brompheniramine, triprolidine, etc.) are most often the best treatment for hives. Antihistamines will relieve itching and may prevent the hives altogether. If the hives occur only rarely, they may be taken on an as needed basis. For cases of chronic urticaria, they are usually prescribed for daily use. Sometimes it is necessary to use a combination of long-acting and short-acting antihistamines.
- **Antidepressants**: These medications are not used for their psychiatric effects in the treatment of hives, but some antidepressants (especially Doxepin) have properties very similar to the antihistamines and can reduce itching and prevent the hives.
- **Steroids**: Rarely, a severe or persistent case of hives or angioedema may require a short-term treatment with oral steroids (like prednisone).
- **Epinephrine**: If angioedema has been severe enough in the past to cause difficulty swallowing, speaking, or breathing, your allergist may recommend that you carry an epinephrine autoinjector (like the Epi-pen).

How long will my hives and angioedema last?
Acute hives will last less than 6 weeks, by definition, and most cases which are related to a recent infection last only 10-14 days. If the hives are caused by a specific food or medication, the symptoms will last only a few hours after the exposure. If angioedema occurs with the hives, it may take a few days for the swelling to resolve since it occurs in deeper, denser tissues.

Chronic hives may last for months to years. About half the cases of chronic hives resolve within 6 months. 66% resolve by 3 years, and 90% resolve by five years. Only 1-2% of chronic hives will last more than 20 years.