



## **URTICARIA (HIVES)**

Urticaria is itchy, pink swellings last a few hours before fading, leaving no trace. New hives appear as old areas fade. They can be pea sized or join to cover broad areas of the body. In some people the hives burn or sting.

Hives are very common – 10-20 percent of the population will have at least one episode in their lifetime. Most hives last shorter than six weeks, but occasionally, a person will have chronic urticaria, defined as hives lasting longer than six weeks.

Hives can sometimes occur in deeper tissues of the eyes, mouth, hands or genitals. These areas may develop swelling that is frightening in appearance, but usually goes away in less than 24 hours. This swelling is called angioedema.

In some cases (acute hives), a single attack of hives is due to an infection or virus and goes away within a few days to a few weeks. Some people get attacks that occur as an allergic reaction to a variety of things: foods (most commonly nuts, chocolate, fish, tomatoes, eggs, fresh berries and milk), insect stings, and medications. In this case, they usually break out within a few hours of the exposure and often figure out the cause by themselves.

Certain people can develop recurrent hives from sunlight, cold, pressure, vibration or exercise (called the physical urticarias). Hives developing from scratching or firmly rubbing the skin is called dermatographism. Dermatographism is the most common of the physical urticarias, affecting about 5 percent of the population. This condition sometimes also occurs along with other forms of hives. Some people react with hives to anything that makes them hot or sweaty. Triggers can be sunlight, exercise, hot baths, blushing or anger. These are tiny intensely itchy hives with a big red blotch around them and are called cholinergic urticaria. Pressure urticaria shows up as a deep welt in an area of prolonged pressure. Occasional people react to the cold. Even more rare is a reaction to sunlight.

In the majority of cases hives are “idiopathic” (no discernible cause). In about half of patients with chronic idiopathic hives, the explanation is that the body's immune system is, in a sense, overactive (“autoimmune”). Some urticaria sufferers have other signs of autoimmune problems.

Since in most patients with chronic hives there is no known cause, no/minimal workup will be done and the treatment is antihistamines. Common reasons for lack of effectiveness of antihistamines are:

- 1) The particular antihistamine used is not strong enough
- 2) The antihistamine is not used in a high enough dose
- 3) The antihistamines are not continued for a long enough period

The most well tolerated initial treatment is non-sedating antihistamines. If that doesn't eliminate the hives, a sedating-type of antihistamine (diphenhydramine, hydroxyzine, cyproheptadine or doxepin) is added at night. High doses may be needed and this will cause sedation.

Fortunately, most patients will become less affected by sedation after they have taken the drug regularly for a while. Hives that do not respond to standard antihistamines may be treated with doxepin. Doxepin is an antidepressant that has strong antihistamine effects, blocking both H1 and H2 receptors. Doxepin can be very sedating. Doxepin has not been approved by the FDA for treating hives, but most physicians feel this is an appropriate use.

The important point is that the medicine(s) should be taken every day (whether or not hives are present), trying to prevent the hives. Some doctors suggest that medications should be continued for long periods – perhaps even a month after the hives have disappeared.

The newest treatment for the small group that fails high-dose, round-the-clock antihistamines is Omalizumab (brand name Xolair), an asthma medicine that blocks IgE binding to mast cells. This medicine is usually a monthly injection and it works for about 50% of the small group that has not responded to anything else. Since it is a newer immune modulating medicine, it is very expensive and insurance usually won't approve it unless the hives have lasted over six weeks and have failed multiple other treatments.

### **POSSIBLE CAUSES OF ACUTE HIVES**

Nonsteroidal anti-inflammatory drugs (NSAIDs) – aspirin, ibuprofen, or naproxen

Antibiotics – penicillins, cephalosporins, quinolone antibiotics (eg, ciprofloxacin) and the sulfa antibiotics (eg, sulfamethoxazole).

Hormones – the hormones present in oral contraceptives and hormone replacement therapy.

Painkillers - (eg, codeine and morphine), and muscle relaxants used in anesthesia.

Contrast solutions given into the vein during x-ray procedures.

Physical contact with allergens – Animal saliva, plant products and resins, raw fish or vegetables, and latex. (Latex is present in many medical and household products, including gloves, balloons, and condoms.)

Insects stings – Stings from certain insects, such as, bees, wasps, hornets, and fire ants.