Hives (Acute Urticaria)

Hives are itchy red or white bumps on the skin. This itchy rash is also known as urticaria, or as nettle rash. The rash may be acute (if it comes on suddenly and does not last for long) or chronic (if the rash has lasted for six weeks or more).

The rash may be triggered by an allergy, or by another factor such as heat or exercise. In most cases the rash lasts 24-48 hours and is not serious. You may not require any treatment; however, medicines called antihistamines can ease the symptoms until the rash clears.

What are hives?

When you have hives (urticaria), you have an itchy rash caused by tiny amounts of fluid that leak from blood vessels just under the skin surface. Hives can be classed as follows:

- **Acute** - if it develops suddenly and lasts less than six weeks. Most cases last 24-48 hours. In some cases the rash only lasts a few hours. About 1 in 6 people will have at least one bout of hives in their lives. It can affect anyone at any age. Some people have recurring bouts of acute hives.
- **Chronic** - if it persists longer than six weeks. (Chronic means persistent or ongoing.) This is uncommon. See separate leaflet called Hives (Chronic Urticaria) for more details.

This rest of this leaflet deals only with hives which are acute.

What does the rash of hives look like?

The rash usually appears suddenly and can affect any area of skin. Small raised areas called weals (or wheals) develop on the skin. The weals look like mild blisters and they are itchy. Each weal is white or red and is usually surrounded by a small red area of skin, which is called a flare. The weal and flare rash of hives looks similar to the rash caused by a nettle sting.

The weals are commonly 1-2 cm across but can vary in size. There may be just a few but sometimes many develop over various parts of the body. Sometimes weals next to each other join together to form larger ones. The weals can be any shape but are often circular. As a weal fades, the surrounding flare remains for a while. This makes the affected area of skin look blotchy and red. The blotches then fade gradually and the skin returns to normal.

Each weal usually lasts less than 24 hours. However, as some fade away, others may appear. It can then seem as if the rash is moving around the body. The rash may appear quite dramatic if many areas of skin are suddenly affected.
Are there any other symptoms?

- Most people with hives (acute urticaria) do not feel ill; however, the appearance of the rash and the itch can be troublesome.
- In some cases a condition called angio-oedema develops at the same time as hives. In this condition some fluid also leaks into deeper tissues under the skin, which causes the tissues to swell. See separate leaflet called Angio-oedema for more details:
  - The swelling of angio-oedema can occur anywhere in the body but most commonly affects the eyelids, lips and genitals.
  - Sometimes the tongue and throat are affected and become swollen. The swelling sometimes becomes bad enough to cause difficulty breathing.
  - Symptoms of angio-oedema tend to last longer than urticarial weals. It may take up to three days for the swollen areas to subside and go.

- A variation called vasculitic hives occurs in a small number of cases. In this condition the weals last more than 24 hours, they are often painful, may become dark red and may leave a red mark on the skin when the weal goes. Technically, this type of rash is not urticaria.

What causes hives?

A trigger causes cells in the skin to release chemicals such as histamine. These chemicals cause fluid to leak from tiny blood vessels under the skin surface. The fluid pools to form weals. The chemicals also cause the blood vessels to open wide (dilate) which causes the flare around the weals. The trigger is not known or identified in about half of cases. Some known triggers include:

- **Allergies** - for example:
  - Food allergies such as allergies to nuts, strawberries, citrus fruit, egg, food additives, spices, chocolate, or shellfish. Sometimes you can develop an allergy to a food even if you have eaten it without any problem many times before.
  - Allergies to insect bites and stings.
  - Allergies to medicines such as penicillin, aspirin, anti-inflammatory painkillers, etc.

- **A viral infection** such as a cold or flu can trigger an urticarial rash in some people. (You react to the virus.) A mild viral infection which causes few other symptoms is probably a common trigger of an urticarial rash that develops without an apparent cause.

- **Skin contact** with certain substances causes a local area of hives in some people - for example, chemicals, latex, cosmetics, plants, ointments, nettle stings, etc.

  Pine tree contact:

  ![Image of hives](Image)

- **Inducible urticaria** - sometimes called physical urticaria. This is a type of hives in which a rash appears when the skin is physically stimulated. The most common is called dermatographism (dermatographia) when a rash develops over areas of skin which are firmly stroked. In other cases, an urticarial rash is caused by heat, cold, emotion, exercise, or strong sunlight. See separate leaflet called Hives (Inducible Urticaria) for more details.
Are hives serious?

Usually not. The rash is itchy but normally fades within a day or so and causes no harm. Most people with hives (acute urticaria) do not feel too unwell unless they have a cold or flu that is triggering the rash. The cause of the rash is not known in more than half of cases and it is commonly a one-off event.

However, hives may be more serious in the following situations:

- **Food allergy.** If a food allergy is the cause then the rash is likely to return each time you eat the particular food. This is more often a nuisance than serious.
- **Severe allergies.** People who have a severe allergic reaction to peanuts, insect stings, etc, often have an urticarial rash as one of the symptoms. This is in addition to other symptoms such as severe angio-oedema, breathing difficulties, collapse, etc. A severe allergic reaction is called anaphylaxis. **But note:** most people with acute urticaria feel well and do not have anaphylaxis.

Are any tests needed?

Usually no tests are needed. The rash is very typical and is easily recognised as hives by doctors. In many cases you will know what caused the rash from the events leading up to it. (For example if you have just been put on a new medicine, or if your skin came into contact with a nettle, or if you were stung by a bee.) In some cases it may be helpful to have some allergy tests such as skin prick tests to help determine the specific cause. Sometimes blood tests for allergies can be helpful. Occasionally, if urticarial vasculitis is suspected, a sample of the skin may be taken (a skin biopsy) for further analysis.

What is the treatment for hives?

- Often no treatment is necessary, as the rash commonly goes within 24-48 hours.
- A cool bath or shower may ease the itch.
- Calamine lotion or menthol 1% in aqueous cream can help with itching, although if it is left on for too long the itch may come back. These can be bought without a prescription.
- If you can identify a trigger such as a food then it would be sensible to avoid it in the future.
- **Antihistamine tablets can ease symptoms.** Antihistamines block the action of histamine which is one of the chemicals involved in causing hives. You can get antihistamines on prescription. You can also buy them without a prescription from pharmacies. There are several types. The pharmacist will advise. The ones most often used for hives are:
  - Cetirizine; or
  - Loratadine; or
  - Fexofenadine

- These types of antihistamines usually work well and do not cause drowsiness. Occasionally an older antihistamine which makes you sleepy may be useful, particularly if the itch keeps you awake at night. In this case an antihistamine such as chlorphenamine may be useful.
- A short course of steroid tablets is sometimes prescribed in severe cases to help reduce swelling in the skin. Usually prednisolone would be the steroid used, for a short course of a few days only.

If you have a severe episode of hives then you may be referred to a specialist. Skin specialists (called dermatologists) or allergy specialists (called immunologists) may be able to help. In particular, if angio-oedema or anaphylaxis occurred at the same time, you would be referred or admitted to hospital. This is to reverse the reaction quickly. It is also to confirm the diagnosis and, where possible, to identify a cause. For example, if a nut allergy is suspected to have caused a severe episode then this can confirmed by tests. You may then be given advice on how to avoid the cause and on what to do if it should occur again.
Further reading & references

- Urticaria; NICE CKS, May 2016 (UK access only)
- Urticaria; DermNet NZ
- Urticaria and angio-oedema: an overview; Primary Care Dermatology Society
- Urticularial vasculitis; DermNet NZ

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