

Hives explained

Hives (urticaria) is a type of rash characterised by circular weals of reddened and itching skin. The weals can vary in size, from relatively small to as large as a dinner plate. The condition can afflict any part of the body, but is common to the trunk, throat, arms and legs. The weals generally rise in clusters, with one cluster getting worse as another gets better.

Hives can be triggered by a number of different factors. The most common trigger is an infection but medications, insect stings and food allergy may also trigger hives. Other conditions such as systemic lupus erythematosus or problems with the thyroid gland, can also bring on an attack of hives in susceptible people.

It is thought that around one in every six people will experience at least one attack of hives at some point in their lives.

Symptoms

Symptoms of hives include:

- Raised circular weals appear that look like mosquito bites.
- The weals are red on the outer rim and white in the centre.
- Localised itching is present.
- An individual weal has a lifespan of around 24 hours or less.
- The weals appear in batches or clusters.
- One batch fades away as a new batch appears.
- The rash may last for days or weeks.

Mast cells and histamines

The lining of the deepest layer of the skin, the dermis, houses 'mast cells' that form part of the immune system. Mast cells contain chemicals, including histamine, which they release to help the body defend itself against micro-organisms and other foreign invaders.

The immune system of a person with hives will react to certain substances, such as particular foods, by producing antibodies. These specialised proteins trigger a variety of immune system responses, including the release of mast cell chemicals – notably histamine. In small amounts, these chemicals cause itching and reddening of the local area. In large amounts, the nearby blood vessels become dilated and the area swells due to the accumulation of fluid.

Allergens that commonly cause hives

In around one-third of cases, the cause of hives is unknown. Some factors known to cause hives include:

- Medications – such as antibiotics, aspirin and codeine
- Foods – such as shellfish, eggs, nuts, peanuts, chocolate, cheese, tomatoes, soy products and strawberries
- Some food additives
- Infections – including bacterial, viral or parasitic
- Certain underlying conditions – such as systemic lupus erythematosus, rubella and hepatitis
- Emotional stress
- Certain plants
- Sunshine and heat
- Cold temperatures
- Exercise and sweating
- Bee and wasp stings.

Diagnosis methods

Hives can be commonly mistaken for insect bites or some other types of skin rashes. Diagnosis methods can include:

- Medical history
- Physical examination
- Allergy tests, such as skin prick tests
- Elimination diet, under medical supervision, to identify the allergen if certain foods are suspected.

Treatment options

For most people, each attack of hives will build in severity and intensity, if their sensitive immune system is repeatedly exposed to the same trigger. Avoiding the known trigger is an important management technique. Treatment for severe or recurring hives may include:

- Checking that the rash isn't caused by an underlying disorder
- Medications, such as antihistamines and corticosteroids, to reduce the immune system response
- Avoidance of known triggers
- Avoidance of factors that exacerbate the condition – such as sunshine, heat and hot showers.

Where to get help

- Your doctor
- Nurse on Call Tel. 1300 606 024 – for expert health information and advice (24 hours, 7 days)
- Dermatologist.

Things to remember

- Hives is a skin rash characterised by reddened and raised circular weals.
- This type of skin rash is an allergic reaction, which means the immune system responds to a substance as if it were toxic.
- Treatment options include avoidance of known triggers, and medications such as antihistamines and corticosteroids.

This page has been produced in consultation with, and approved by:

Australasian Society of Clinical Immunology and Allergy (ASCIA)

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