

Chronic urticaria and Angioedema in Children

What is it?

Urticaria is an itchy, lumpy, red rash, often called hives, weals or nettle rash

Angioedema is a deep swelling in the skin, often affecting the face or lips. It usually occurs with urticaria, but can rarely occur in isolation.

What is the difference between acute and chronic urticaria?

Acute urticaria: lasts for any period up to 6 weeks. It is usually a response to a viral infection, but may also be due to an allergy

Acute intermittent urticaria: lasts for less than 6 weeks, and then recurs from time to time.

Chronic urticaria: lasts for more than 6 weeks. Individual spots usually last less than 24 hours and occur on most days.

Why does it happen?

Chronic urticaria is not technically an allergy. It occurs when mast cells in the skin are stimulated to release a chemical called histamine. Often no cause can be found, in which case it is known as **spontaneous urticaria**.

In some children it arises in response to physical factors such as itching, scratching (in which case it is known as **dermographism**), cold or stress.

Urticaria which has a defined physical factor is often called **inducible urticaria**. Common causes are listed **in the following box**.

Heat	Cold
Exercise	Vibration
Aquagenic (water)	Solar (sun)
Pressure	Delayed pressure
Dermographism	

Urticaria can occasionally also, less frequently, be linked to other causes. These include:

- infections e.g. parasites, glandular fever, common childhood viruses or hepatitis
- autoimmune conditions e.g. autoimmune thyroiditis
- drugs e.g. non-steroidal anti-inflammatories (ibuprofen, aspirin) or opiates (morphine or codeine)

If there is “staining” of the skin or bruises left behind after the urticarial lesions fade this is more concerning and requires further, more urgent investigations.

Swelling of the tissues (angioedema) alone can be caused low enzyme levels so will be investigated thoroughly.

How common is urticaria and angioedema?

Urticaria is a common condition, affecting around 10% of children at some point. Chronic urticaria is less common, affecting around 0.5% of children.

How is it diagnosed?

The diagnosis is made on the history and pattern of the rash. Usually, no tests are needed. Your doctor may wish to perform allergy tests if the rash/swelling always occur very soon after exposure to a particular food or other allergen such as latex. If your child suffers with angioedema alone, your doctor may perform some blood tests.

How is it treated?

Chronic urticaria is not associated with severe allergic reactions (anaphylaxis) and adrenaline auto-injectors are **not** required.

It can, however, cause difficulty sleeping and problems concentrating at school (impact on quality of life). Effective management is therefore important.

Exposure to things which make the rash worse, such as cold weather, should be avoided, wherever possible. Whilst hard, the avoidance of itching is the best method for preventing worsening of the itch. Calamine lotion has no proven effect in improving hives, but can be cooling on the skin.

A regular dose of a non-drowsy antihistamine is the best treatment (such as Cetirizine, Loratadine or Fexofenadine). The medicine may need to be taken for many months or even years, and it is safe to do this, indeed the medications work better when taken regularly. The dose of the antihistamine may need to be increased above the stated maximum dose, or other medicines added all of which is safe.

A short course of steroids may be needed if the swelling or rash is particularly severe.

Patients may well be recommended to start on a multivitamin containing vitamin D, or to take an over the counter de-worming pill for the whole family as standard treatment.

How long will it last?

Urticaria improves with time, but this may take a while.

After 3 years, a third of children with chronic urticaria are better. Most children are disease free after 7 years.

Urgent medical advice

Urgent medical advice should be sought if there is associated severe abdominal pain, if there are breathing difficulties, wheezing, loss of consciousness or lethargy, repetitive vomiting. If these symptoms occur please dial 999, or attend the Accident and Emergency department.

Support

Unfortunately, there is not a dedicated urticaria support group but useful information can be found at:

- www.nhs.uk/conditions/Nettle-rash/Pages/Introduction.aspx
- www.nhs.uk/Conditions/Angioedema/Pages/Introduction.aspx
- www.allergyuk.org/skin-allergy/urticaria-and-angiodema - this page has some excellent slide shows and videos
- www.helpforhives.co.uk
- A useful app for monitoring hives and severity is: **SymTrac HIVES**

Children's Allergy service

If you have followed the escalating plan given to you by your GP and you are still having problems, you may need a referral to the children's allergy service.

If you already attend the children's allergy service and you have followed your consultant's plan and the hives are still breaking through at the maximal doses recommended, please contact the children's allergy service via the secretaries on: **01392 406633**

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by Royal Devon staff undertaking procedures at the Royal Devon hospitals.

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