

What are urticaria and angioedema?

Urticaria is a common condition affecting up to 1 in 5 people at some point in their lives. It causes itchy red or white bumps on the skin that are also known as hives.

Angioedema causes swelling of the soft areas of skin especially around the eyes, the lips, and sometimes inside the mouth. Urticaria can be acute (short-lived) or chronic (persistent).

What do urticaria and angioedema look like?

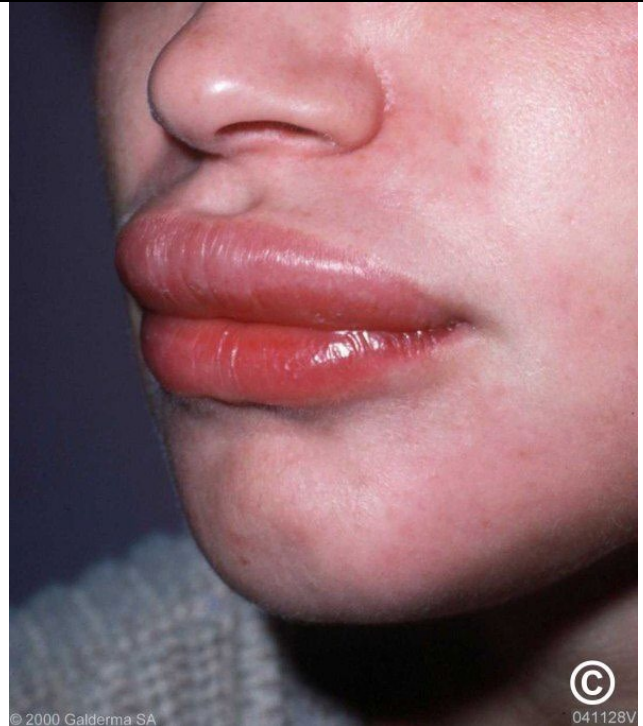
If this leaflet is not printed in colour please refer to the section **Patient Information Leaflets** at base of the homepage of www.pcds.org.uk, then scroll down for **Urticaria and Angioedema**.

Most people with **urticaria** feel well. Urticaria presents with **itchy skin lesions with a wheal and flare** – the central raised round or ring-shaped white area (wheal) is surrounded by red skin (flare), which looks like a nettle-sting rash. Wheals are commonly 1-2 cm in diameter but can join together to form much larger ones. There may be just a few wheals, or sometimes many develop over various parts of the body. As a wheal fades the surrounding flare remains for a while, making the affected area of skin look red and blotchy. In skin of colour the lesions may be lighter or darker than the surrounding skin. The wheals tend to come and go over a few hours. The rash may clear completely, only to return a few hours or days later.



Some types of urticaria look different – see the section below about *inducible urticaria*.

Angioedema causes swelling of the skin usually affecting soft areas of skin, such as the eyelids, lips or inside the mouth, and the genitalia, but may occur anywhere. The swellings of angioedema take longer to clear than lesions of urticaria, sometimes up to three days. Although angioedema can be dramatic, it is usually not life-threatening.



What causes urticaria?

Urticaria is caused by the release of a substance called **histamine** and other chemicals from cells in the skin called mast cells. These chemicals cause small amounts of fluid to leak from blood vessels just under the skin surface; this fluid pools to form wheals. The chemicals also cause the blood vessels to open wide (dilate), which causes the red flare around the wheals.

In some people the trigger causing the release of chemicals can be identified, however, in many people no cause is found.

Urticaria can be **acute** (a short episode lasting less than 6 weeks) or **intermittent** where episodes come and go. In some cases, the trigger may be a food or drug allergy, in which case the urticaria (with or without angioedema) will usually appear soon after eating the food or taking the medication. For young babies, in whom urticaria is rare, cow's milk allergy is the commonest cause. As children grow up, they may react to different foods, including eggs, nuts, fruits, or shellfish. Bee and wasp stings can cause acute urticaria. However, a specific reason for urticaria is often not found.

Urticaria going on more than six weeks is known as **chronic urticaria**. The most common cause of chronic urticaria is called **chronic spontaneous urticaria**, in

which the wheals come and go without any apparent cause. This is **not a food allergy**. Chronic spontaneous urticaria may have an underlying autoimmune process, in which the patient's own antibodies trigger a release of histamine from the mast cells in the skin.

The **other main type of chronic urticaria is known as inducible urticaria**, in which the lesions of urticaria usually only appear in response to a specific trigger. Examples of inducible urticaria include:

Dermographism (right) – wheals are triggered by rubbing or scratching the skin, and generally last for less than an hour.



Delayed pressure urticaria (right) – wheals develop where pressure has been applied to the skin, for example from tight clothes or from gripping tools. Usually the swelling develops several hours later. It can be painful and last longer than 24 hours. Both dermatographism and delayed pressure urticaria can occur with other types of urticaria.



Cold urticaria (right) – is triggered by exposure to cold, including rain, wind, and cold water. People with cold urticaria must **avoid swimming in cold water** (this can be life-threatening), and must inform medical staff before undergoing operations so they can be kept warm during the procedure.

Aquagenic urticaria – is caused by contact with warm or cold water, usually on the upper part of the body. The wheals tend to be smaller than in other types of urticaria. Unlike cold urticaria, this is not life-threatening.



Solar urticaria (right) – painful red lesions appear immediately after exposure to sunlight, lasting for less than one hour.



Cholinergic urticaria (right) – is triggered by sweating as a result of exertion, heat, emotional stress, or eating spicy food. Within minutes, small itchy red bumps appear, usually on the upper part of the body, but they may be widespread. The rash fades in less than an hour.



Contact urticaria – various chemicals, foods, plants, animals, and animal products, can cause wheals within minutes at the site of contact. Reactions can occasionally be severe, for example in people allergic to rubber/latex (right) and peanuts.



Things that you can do to help yourself

- Try and **avoid triggers** (things that makes your urticaria worse) such as heat, tight clothes, stress, and alcohol
- **Try keeping cool**, as urticaria may tend to flare up in warmer conditions. In particular, keep the bedroom cool at night. A cool bath or shower may ease the itch. Calamine lotion or creams containing menthol can help with itching - these can be bought without a prescription
- **Medications to avoid** – do not take aspirin, ibuprofen (and other non-steroidal anti-inflammatory drugs) or opiates, such as codeine unless it is essential, since these medicines may aggravate urticaria. If you suspect that a medicine may have caused your urticaria, you should inform your health professional. Angioedema without wheals may be caused by a group of drugs called ACE inhibitors, used to treat high blood pressure
- In a small percentage of people with chronic spontaneous urticaria (persistent urticaria) some foods, food colouring agents, and preservatives **may worsen urticaria. Note – this is not an allergy and allergy tests are not appropriate.** Keeping a food diary may help you identify something that makes your urticaria worse. These substances can be left out of the diet to see if the condition improves, and later reintroduced to confirm whether they make the urticaria worse
- **You must seek urgent medical advice if you are having a severe reaction with problems such as difficulties breathing or swallowing**

Treatment with antihistamines

Antihistamine tablets reduce the itchy rash in most people. They work by blocking the effect of histamine but may not relieve urticaria completely.

It is important to use **non-sedating antihistamines** (less likely to make you feel drowsy) as opposed to sedating antihistamines (make you feel drowsy).

Antihistamines can be used as and when needed, however, if urticaria occurs frequently, antihistamines should be taken regularly every day.

It is recommended that **adults** take one antihistamine a day, however, it has become common practice to increase the daily dose **up to a maximum of four non-sedating antihistamines a day** if needed to control the urticaria (eg two in the morning and two in the evening).

Antihistamines can be purchased without a prescription; however, you will need to take advice from a health professional for **children** who are likely to need a smaller dose.

If you are **pregnant, you must not take an antihistamine** without first seeking advice from your health professional.

Antihistamines can be taken for as long as the urticaria persists.

Make an appointment at your GP surgery

If you are worried about your urticaria and/or angioedema, or it is not improving significantly with the recommendations highlighted above, you will need to make an appointment at your GP surgery. You will need to have a **blood test** to make sure there is no simple underlying cause for your urticaria such as an overactive thyroid gland.

For information on **specific treatments** refer to the **Best Practice Concise Guidelines** or the **A-Z list of Clinical Conditions** from the homepage of www.pcds.org.uk.

Your mental health

Urticaria can have a significant psychological impact and may affect many areas of daily life including work and personal relationships. If the urticaria is affecting your mental health, you should discuss this with a health professional.

Referral to a specialist

The following people will require referral to a specialist, usually a dermatologist:

- Chronic spontaneous urticaria, and other cases of urticaria or angioedema that do not improve significantly with an appropriate dose of a **non-sedating antihistamine**
- **Cold urticaria** – always requires further investigations and specialist management, including the provision of adrenaline pens (see below)
- **Solar urticaria** – may require further investigations, and can be more difficult to treat, so specialist management is usually required
- People with **latex allergy** may need referral to confirm the diagnosis and receive management advice
- People with **angioedema** (swelling around soft tissues such as the eyes, lips, and mouth) if associated with any of the following:
 - **Angioedema without urticaria** requires further investigations. The only exception is if it is caused by a medication (eg aspirin, or ACE inhibitors used to treat high blood pressure and heart conditions)
 - Life-threatening reactions caused by **severe allergies** to certain foods (eg peanuts), drugs, or insect bites, may need to be referred to an immunologist (a doctor who specialises in allergy). People with severe allergic reactions (**anaphylaxis**) develop difficulty in breathing and then collapse; most affected people will also have an urticarial rash and angioedema. People with anaphylaxis will be provided with adrenaline (epinephrine) that is given as an injection and must be carried with you **at all times** in case you have a severe episode. In addition, if you are having a severe reaction you must go straight to your local accident and emergency department or call for an ambulance urgently. For more information on adrenaline injections search the term **epipen** in the top corner of www.patient.info
 - **Some other cases of food allergy**. Most cases of food allergy do **not** cause life-threatening reactions. However, in very young children with food allergy, a referral will be needed in some circumstances, eg if the reaction gives cause for concern, or, if the child is allergic to more than one type of food. The referral is usually to an immunologist or a paediatrician (a children's doctor) with a particular interest in food allergy

Referral is not needed if urticaria comes and goes in people who are well and do not have any life-threatening symptoms, and people with chronic (long-term) urticaria, whose symptoms are well-controlled with an appropriate dose of antihistamine.

What will happen when you are referred?

The appointment may be face-to-face (the person attends the clinic), or a video call (teledermatology).

Helping with other skin conditions

If you, a family member, or friend have an undiagnosed skin condition; or you want to learn more about how to treat skin conditions, please visit www.pcds.org.uk – if you click the purple tile near the top of the homepage that reads **Take a Tour** you can learn how best to use this website.