The aim of this leaflet

This leaflet is designed to help you understand more about urticaria. It tells you what this condition is, what causes it, what can be done, and practical advice for living with urticaria.
What is urticaria?

Urticaria is the medical term for a non-contagious illness presenting with itchy hives.

The classic signs and symptoms of urticaria are itchy hives and/or large, swollen areas on the skin (known as angioedema). The wheals (or raised welts that suddenly form) are short-lived in nature and change their distribution on the skin in a few hours. It is generally categorised as either acute or chronic (more information below under “What are the signs and symptoms of urticaria?”).

How common is urticaria?

Urticaria is a common disease. Acute urticaria occurs in up to 20% of all people during their lifetime. It generally affects all age groups, although it is most frequently observed in children, adolescents, and young adults. Chronic urticaria occurs much less frequently. There are no precise figures for the different types of urticaria, but experts estimate that around 1-1.5% of the overall population suffers from chronic urticaria.

What are common causes and triggers of acute and chronic urticaria?

**Acute urticaria** can be triggered by many different factors such as:
- Acute viral or bacterial infections
- Medications
- Allergies (for example, allergies to food, bee venom, or wasp venom).

The connection between the trigger and the reaction is usually clear. However, in about half the cases it cannot be determined.

**Chronic urticaria** can appear suddenly or develop slowly, although the hives appear spontaneously and may be induced by a particular stimulus. Possible trigger factors involve, for example, an underlying persistent infection caused by the bacteria *Helicobacter pylori* or *Streptococcus*, or by parasites, thyroid disease, an intolerance to the body’s own tissues (called autoimmunity), allergy-like intolerance reactions (called pseudoallergy) and insect bites. The inducible forms of the disease are triggered by cold temperatures, heat, sun, pressure, friction, exercise or other influences.

But...what actually happens in the body at the cellular level? Triggered or “activated” cells in the body’s immune system (called mast cells) release increased levels of histamine, a messenger molecule. This causes the surrounding blood vessels to dilate and become leakier. Fluid collects in the various skin layers, leading to swelling. In addition, sensory nerves (nerves that transmit sensory stimuli) are activated, resulting in itching and redness. It is not fully understood why the mast cells release more histamine, but there are a number of factors behind it.

What are the signs and symptoms of urticaria?

The main symptoms of urticaria are hives and angioedema. These can occur at the same time or separately. More than half of acute urticaria patients have both symptoms, while this is true for 40-50% of chronic sufferers.

Hives usually itch and sometimes burn. Angioedema can cause pain as well as itching. The hives normally disappear quickly on their own (after 1-24 hours) unlike angioedema, which can last up to three days.

The symptoms of acute urticaria only occur once or several times for up to six weeks. A small percentage of patients go on to develop chronic urticaria, which is by definition when the symptoms last longer than six weeks. The disease can persist for several months, years, or even decades, leading to recurring flare-ups. The frequency at which the symptoms recur varies from patient to patient.
How is urticaria diagnosed?

Acute urticaria usually resolves on its own, and is only treated symptomatically. A clinician can diagnose it based on the patient’s history and a physical examination. It is not advisable to carry out further diagnostic tests at this point. However, further testing may be recommended for infants who may react to certain foods such as milk, eggs, or peanuts, in order to prevent any severe allergic reactions (*anaphylaxis*).

If the symptoms last longer than six weeks (chronic urticaria), the first step is for the clinician to take a careful history from the patient and a simple blood sample for laboratory tests (differential blood count and erythrocyte sedimentation rate ESR or CRP to identify inflammation in the body). It is then decided on an individual basis whether further diagnostic tests are required in order to check for underlying causes such as infections or allergies. If patients present with angioedema only in the majority of cases it is histamine induced and by definition thus also urticarial, but an important differential diagnosis needs to be ruled out.

How is urticaria treated?

First of all it is important to know that the disease is benign, not life threatening. The symptoms of wheals and AE in acute urticaria can mostly be controlled with antihistamines, which are allergy medicines possibly at higher doses. If a trigger is known, the patient should avoid it as much as possible.

For chronic urticaria, treatment is usually needed for several months up to years. Antihistamines are also first-line treatment for chronic urticaria but often need up dosing up to four fold. For patients who do not respond well to these drugs, other recently-developed medicines are available. If the clinician and patient have managed to identify a trigger, it can be avoided in the future and the cause can be treated.

There can be very different types of treatment depending on the cause. For drug intolerance, the patient stops taking the medication as recommended by the clinician or switches to another medication if necessary. If the patient has a bacterial infection, the clinician may prescribe antibiotics. Urticaria is rarely caused by a food allergy or intolerance. Changes to the diet should therefore only be made if recommended by a clinician, following a confirmed diagnosis, and should be supervised by a qualified nutritionist. Chronic urticaria may eventually heal on its own even if left untreated.

There are specialised reference centres for urticaria treatment that can be contacted by your physician if there are any questions regarding your treatment, (more information can be found on the internet, see GA²LEN UCARE webpage [https:/ /www.gazlen-ucare.com/centers.html](https://www.gazlen-ucare.com/centers.html)).

What is practical advice for living with urticaria?

Tips for acute urticaria

- Avoid suspected triggers if possible like NSAID. It may be possible to re-introduce suspected drugs or foods without harm once the urticaria has settled. Asking a specialist for advice on this is suggested.
- For temporary relief of symptoms, ask your clinician or pharmacist about taking antihistamines.
- A comprehensive diagnosis and allergy tests are usually not necessary if the symptoms only last for a period of less than six weeks. If the symptoms last longer, you should see a clinician.

Tips for chronic urticaria

- If the cause or trigger is unknown, it is a good idea to keep an urticaria calendar or an urticaria diary. This will help you and your clinician identify the possible cause.