# Urticaria and Angioedema

#### **Child Health Information**

Urticaria and angioedema are skin conditions which have a variety of causes. If the symptoms occur many times over a period of more than six weeks it is called 'recurrent' or 'chronic'. This leaflet explains more about these conditions.



## What are 'urticaria' and 'angioedema'?

**Urticaria** is a red itchy bumpy rash which can occur anywhere on the body. It is common and affects at least 20% of people at some stage in their lives. It can look quite dramatic. The swelling and redness often improves in one area and then appears in another. Urticaria can tingle and itch but is not usually painful. It is also called nettle rash, welts or wheals.

**Angioedema** is swelling deep in the skin which occurs in a minority of people with urticaria or sometimes on its own. It frequently involves the eyelids, lips and sometimes the mouth. Sometimes the swelling can be very obvious. It can cause swelling of the eyelids making it hard to open the eyes or cause dramatic lip swelling.

**Recurrent** means that these symptoms keep happening over several weeks or months. This is sometimes called 'chronic'.

#### What is the cause?

- The rash and swelling is caused by substances such as histamine being released from cells in the skin called mast cells. The same thing happens in the skin in food or wasp allergies etc so this is why the rash looks the same.
- Many episodes of urticaria in childhood are caused by viral infections which get better by themselves. Sometimes it is due to other infections such as mycoplasma or streptococcus which may need antibiotic treatment.
- In most people with recurrent (chronic) urticaria and angioedema there is no good reason for this to occur. The cells in the skin are releasing histamine and other substances without any good reason or cause. This is sometimes called 'idiopathic' or 'spontaneous'.
- Less commonly recurrent urticaria can have other triggers including cold, heat, exercise, pressure on the skin or stress.
- Urticaria can sometimes be caused by medications particularly ibuprofen and related medicines (NSAIDS) or some blood pressure medications. Recurrent urticaria can occasionally be linked with abnormal thyroid function or coeliac disease. If the condition persists then checking this with a blood test may be recommended.
- If there is only angioedema with no itch or urticaria, tests for a rare illness called hereditary angioedema may be required.

## Is urticaria & angioedema an allergy?

A single episode of urticaria or angioedema may be due to an allergy, but unless there is an obvious link with a particular food or pollen etc then an allergy is not usually the cause. If the urticaria does not clearly follow within about one hour of eating a food it is very unlikely to be caused by that food.

An episode of urticaria or angioedema which continues for more than a day is most commonly due to viral infections in children.

Recurrent (chronic) urticaria or angioedema occurring frequently over several weeks or months is very rarely due to allergy. Routine allergy tests and avoidance of substances are not usually necessary.

## Is recurrent urticaria & angioedema life-threatening?

It is extremely unlikely for recurrent (chronic) spontaneous urticaria to be life-threatening. Recurrent urticaria/angioedema tends to occur on exposed parts of the body and does not involve the throat or windpipe. The tongue and lips may swell which can be alarming but is harmless and does not usually result in breathing problems. If however you have any difficulty breathing during an attack call an ambulance.

## How long will the urticaria & angioedema continue?

Many children get a single episode which lasts a few days. Some children get several episodes of urticaria/angioedema over a 4-6 week period which then settles completely. This picture is usually caused by a virus.

In many with recurrent urticaria and angioedema the symptoms last for 6-18 months before settling. Regular antihistamines will usually help the symptoms to settle faster. In some people the urticaria and angioedema then comes back again months or years later.

#### What is the treatment?

The most commonly used medications for urticaria and angioedema are **antihistamines**. These can be used at the start of an attack to reduce the itching, rash and swelling.

- If the urticaria or angioedema occurs frequently then antihistamines are best taken every day to prevent attacks. Antihistamines tend to work better to prevent attacks than to settle them down once the symptoms have started. For those with recurrent urticaria and angioedema antihistamines can be safely taken for prolonged periods of months or even years. Sometimes double or even four times the normal dose is needed.
- The newer non-sedating antihistamines such as cetirizine, loratadine and fexofenadine are preferred to the older antihistamines such as chlorphenamine (Piriton®) as they are more effective and the older types can make children drowsy and affect concentration.
- Different people will do best on different antihistamines so if the first one tried is not helpful then another antihistamine should be tried.

- If there is no urticaria or angioedema for several weeks when taking antihistamines then it is worth stopping the medication to see if they are still needed. If the urticaria/angioedema returns the antihistamine should be restarted.
- Simple moisturisers can help sooth when the urticaria flares up. Tepid baths and keeping cool can also help reduce itching.
- Occasionally other medications are needed if the episodes do not improve with regular antihistamines. These medications include leukotriene receptor antagonists (eg Monteleukast<sup>®</sup>) and tranexamic acid.
- Prednisolone (an oral steroid) is occasionally used for severe attacks but cannot be used frequently or for prolonged periods.
- There has been some research into low histamine or salicylate diets but generally these are much too restrictive and unpalatable to be suitable to try in children. Allergy UK (see below) has further information about histamine intolerance for older teenagers and adults.

#### **Further Information**

Allergy UK charity: www.allergyuk.org

British Society for Allergy and Immunology: Chronic urticaria medical guidelines available from www.bsaci.org.uk