



STOP, THINK

## Management of urticaria

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A 35-year old woman presents in your surgery with a two-month history of an almost continuous widespread red, itchy rash. She has been taking anti-histamine tablets, as recommended by her local pharmacist, but with little effect. Increasingly distressed, she wants to know if there is anything else that can be done.

### What issues you should cover

- *Is this urticaria?* Urticaria is characterised by red, raised, itchy wheals which may be 'acute' (defined as single or episodic symptoms lasting for less than six weeks) or 'chronic' (daily or almost daily symptoms occurring for more than six weeks). Acute urticaria is common, affecting 15–24% of people at some point in their lives, and occurs most commonly in children and young adults. Chronic urticaria occurs in approximately 0.1% of the population and is more common

in middle-aged women. Approximately 50% of chronic urticaria is complicated by angioedema.

- *What is the underlying cause?* Identifying an underlying cause is often difficult; even after extensive investigation no underlying cause is found in up to 50% of those patients with acute, and 70% of those with chronic urticaria. Although many causes have been described (see Box 1), in practice the most common identified triggers of acute urticaria are viral infections, drugs and allergic (IgE-mediated) reactions to foods and insect stings. Chronic urticaria is most commonly triggered by drugs and physical or psychological stresses, but importantly, in some cases, may be a marker of underlying malignancy or a systemic disorder. Enquire whether individual urticarial lesions persist in the same location for more than 24 hours and/or if they leave bruises on the skin – positive responses to either question is indicative of underlying vasculitis.
- *Is quality of life affected?* Chronic urticaria, in particular, can cause significant debility including sleep disturbance, low energy levels, disruption of daily activities and social isolation.

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**Box 1: Causes of acute and chronic urticaria****Acute urticaria**

<b>Foods:</b>	Allergic – commonly peanuts, eggs, fish, cows milk, and shellfish (but consider any as potential cause of food allergy) Histamine-releasers – e.g. strawberries Other – scombroid poisoning (from tuna), alcohol, food additives, spices, preservatives
<b>Drugs and chemicals:</b>	Allergic – e.g. penicillins, cephalosporins Histamine-releasers e.g. radiocontrast media, plasma expanders, muscle relaxants, opiates, toxins from nettles and jellyfish Other – non-steroidal anti-inflammatory drugs, ACE-inhibitors, morphine and codeine
<b>Other causes:</b>	Latex Blood products Bee or wasp stings Viral or parasitic infections Idiopathic

**Chronic urticaria**

<b>Physical cause:</b>	Mechanical Thermal Solar Cold Water
<b>Pressure:</b>	Dermatographism
<b>Cholinergic:</b>	Emotion Exercise Heat
<b>Other causes:</b>	Systemic illness Idiopathic

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**What you should do**

Examine the rash if present – urticarial lesions blanch on pressure. Examine those with chronic urticaria for signs of underlying systemic disease.

- If the cause of an acute episode of urticaria is obvious, further investigations are usually unnecessary. Suspected food (and in some cases drug) allergens can be confirmed by specific IgE blood tests (usually done via the local pathology laboratory) or skin prick testing.
- Explain that acute urticarial episodes are typically severe for a few hours before gradually resolving over the following three to four days. Symptoms usually respond well to anti-histamines, although these tend to be more effective in suppressing the itch than the wheal. Treatment should be taken regularly while the symptoms persist.
- Patients with symptoms and/or signs suggestive of urticarial vasculitis should be referred to a dermatologist or immunologist for a wheal biopsy to confirm the diagnosis; organise blood tests

for C3 and C4 assays and inflammatory markers such as erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) whilst awaiting assessment.

- Patients with chronic urticaria should be referred to an allergist or immunologist; organise C3 and C4 complement levels, thyroid auto-antibodies, full blood count and ESR/CRP whilst awaiting assessment. Once physical causes have been identified (see [Box 1](#)), further investigation is usually unrewarding.
- In chronic urticaria, spontaneous remission often occurs within 12 months, but it has been estimated that 50% of patients experiencing symptoms for more than three months will still be affected three years later.
- Treatment for chronic symptoms should be timed to prevent known diurnal exacerbations. Non-sedating anti-histamines should be given to control daytime symptoms, whilst sedating anti-histamines may be more effective for persistent nocturnal symptoms.
- In patients with chronic urticaria in whom symptoms are not controlled by conventional

doses of anti-histamines, increasing the dose or adding in an H<sub>2</sub>-blocker may be considered, although there is little evidence to support these strategies. Cetirizine 10 mg once daily plus hydroxyzine 25 mg at night (if night-time itching is a problem), combined with ranitidine 150 mg twice daily, represents one such strategy. Another approach is to try cetirizine 10 mg once daily, increasing to 20–30 mg daily if symptoms are unresponsive, combined with ranitidine 150 mg twice daily — note, however, that use of cetirizine at these doses is unlicensed.

- Systemic steroids may be helpful in chronic urticaria when anti-histamines prove ineffective, although high doses are typically required. Prolonged use may cause unacceptable side-effects.

#### Contributorship

The paper was written jointly by Samantha Walker and Aziz Sheikh. Samantha Walker is the guarantor for this paper.

#### Conflict of Interest

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#### Further reading

- [1] Joint Task Force on Practice Parameters. The diagnosis and management of urticaria: a practice parameter. *Ann Allergy Asthma Immunol* 2000;85:521–544.
- [2] Greaves MW, Sabroe RA. Allergy and the skin. I - Urticaria. In: Durham SR, editor. ABC of allergies. London: BMJ Books; 1998. p. 36–9.

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