

INTRODUCTION

Urticaria is indeed a common dermatological affliction, which imparts a considerable degree of distress on the sufferer. Its clinical spectrum comprises *urticarial weals* (superficial dermal swellings), *angio-oedema* (deeper swellings), and the dreaded but fortunately rare *anaphylaxis*. Acute urticaria (lasting up to 6 weeks) is commoner in children, whereas chronic urticaria (which lasts anything from 6 weeks to several years) is commoner in adults. The underlying key pathophysiological event is the degranulation of mast cells and basophils, leading to the release of multiple mediators, the most important of which being histamine. Cellular degranulation may be triggered off either via an immunological process (IgE mediated) or directly (non-immunological). The released histamine binds to cutaneous histamine receptors producing the swelling, erythema, and itch. The aim of treatment is simply to suppress the symptoms until the disease process burns out.

CLINICAL FEATURES AND VARIANTS OF URTICARIA

Ordinary urticaria typically consists of recurrent waves of itchy urticarial weals, with or without angio-oedema of the lips and/or eyelids, with each lesion lasting less than 24 hours. In the vast majority of cases, no cause is elicited, and routine blood investigations are not usually helpful¹.

Food allergy is an uncommon cause of acute ordinary urticaria. This may be suspected when there is a convincing history of an acute urticarial flare up within an hour of ingesting a particular dietary item.

Such allergies may be confirmed by performing skin prick tests or a specific IgE RAST blood screen². Drug allergy is another cause of acute urticaria. Contact urticaria / anaphylaxis may result from latex exposure in sensitized individuals. Patients with established food (e.g. peanuts) or latex allergy should carry around a 'life-saving' adrenaline auto-injection (Epi pen) at all times in case of emergencies. It is worth bearing in mind that threadworm infestation in children may sometimes present with urticaria. Indeed, any parasitic infestation, including scabies, may give rise to an urticarial rash as part of the clinical picture, and a high blood eosinophil count is usually present.

Physical urticaria refers to an urticarial reaction in response to a physical stimulus. The most common, and often underdiagnosed physical urticarias are (a) symptomatic dermographism – linear wealing on stroking or scratching the skin³, and (b) cholinergic urticaria – widespread pinpoint urticarial papules in response to overheating and sweating such as after exertion or being in a warm environment⁴. An attack of physical urticaria normally subsides within one hour. Physical urticarias may present in isolation or may sometimes co-exist with ordinary urticaria. The only investigation indicated for suspected physical urticaria is a 'challenge test' in order to reproduce the urticarial eruption such as (a) testing for dermographism by stroking the back with the rounded edge of a wooden spatula, and (b) getting the patient to jog on the spot for a few minutes in case of suspected cholinergic urticaria.

Urticarial vasculitis is a rare distinct form of urticaria, which is clinically distinguished by the fact that weals last for several days, and the lesions often demonstrate a petechial element. A skin biopsy will reveal a vasculitic histology, and patients tend to have an elevated ESR and low serum complement. This disease entity is complement-mediated and hence does not respond to anti-histamines.

Another distinct form of urticaria, which does not respond to anti-histamines, is *angio-oedema of C1 Esterase deficiency* (most commonly hereditary). Patients with this chronic condition complain of recurrent angio-oedematous swellings without urticarial weals, and may affect both skin and mucous membranes. Patients should be warned that potentially fatal laryngeal oedema is a possible complication, which does not respond to adrenaline and corticosteroids. Long term prophylaxis is with androgens or anti-fibrinolytics, and short-term peri-operative prophylaxis or emergency treatment is with fresh frozen plasma or C1 Esterase inhibitor concentrate.

TREATMENT

The mainstay of treatment for ordinary and physical urticarias is anti-histamine therapy. A non-sedating H1 antagonist (loratadine, fexofenadine) or minimally sedating H1 antagonist (cetirizine) is usually sufficient to control most cases of ordinary and physical urticaria⁵. The dose may however need to be increased over and above the standard dose in order to achieve a clinical response. The addition of a

sedating anti-histamine or tricyclic antidepressant at night can prove helpful if sleep is severely disturbed. In refractory cases, the addition of an H2 antagonist (ranitidine, cimetidine) to the H1 antagonist may give superior results. It is worth noting that in patients with chronic urticaria, long term continuous prophylactic therapy confers a better quality of life than intermittent on-demand therapy. As a rule, systemic corticosteroids should be avoided in ordinary and physical urticaria as it will be very difficult to tail them off without a severe rebound of the urticaria. The only exceptions to this rule are severe allergic acute urticaria/angio-oedema, and anaphylaxis. Furthermore, topical steroids are not recommended in view of the migratory nature of the urticarial lesions.

Apart from prescribing drug treatment, patients should be advised on avoiding certain non-specific aggravating factors. These include aspirin, NSAID's, codeine, alcohol, overheating and stress! Finally, a 3-week trial of a diet free from additives (preservatives and colouring agents), which involves avoiding packed and tinned food, and limiting drinking to non-fizzy mineral water, may be worth trying in refractory cases.

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