



Complete Summary

GUIDELINE TITLE

Guidelines for evaluation and management of urticaria in adults and children.

BIBLIOGRAPHIC SOURCE(S)

Grattan CE, Humphreys F, British Association of Dermatologists Therapy Guidelines and Audit Subcommittee. Guidelines for evaluation and management of urticaria in adults and children. Br J Dermatol 2007 Dec;157(6):1116-23. [47 references] [PubMed](#)

GUIDELINE STATUS

This is the current release of the guideline.

** REGULATORY ALERT **

FDA WARNING/REGULATORY ALERT

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- [June 30, 2008, CellCept \(mycophenolate mofetil\) and Myfortic \(mycophenolate acid\)](#): Novartis and Roche have agreed to include additional labeling revisions to the WARNINGS and ADVERSE REACTIONS sections of the Myfortic and CellCept prescribing information, based on post-marketing data regarding cases of Progressive Multifocal Leukoencephalopathy (PML) in patients treated with these drugs.
- [October 29, 2007, CellCept \(mycophenolate mofetil\)](#): Roche has agreed to include additional labeling revisions to the BOXED WARNING, WARNINGS/Pregnancy and Pregnancy Exposure Prevention, PRECAUTIONS/Information for Patients, and ADVERSE REACTIONS/Postmarketing Experience sections.

COMPLETE SUMMARY CONTENT

** REGULATORY ALERT **

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis

RECOMMENDATIONS

EVIDENCE SUPPORTING THE RECOMMENDATIONS

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

CONTRAINDICATIONS

QUALIFYING STATEMENTS

SCOPE

DISEASE/CONDITION(S)

Urticaria, including:

- Ordinary urticaria (acute, chronic, and episodic)
- Physical urticarias
- Angioedema without weals
- Contact urticaria (from allergens, chemicals)
- Urticarial vasculitis
- Autoinflammatory syndromes

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Dermatology

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To provide recommendations for the evaluation and management of urticaria in adults and children

TARGET POPULATION

Adults and children in the United Kingdom with urticaria

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation/Classification

1. Full blood count
2. Erythrocyte sedimentation rate
3. Thyroid antibodies

4. Thyroid function tests
5. Specific immunoglobulin or skin prick test
6. Component of complement as a marker for C1 esterase inhibitor deficiency and in hypocomplementaemic urticarial vasculitis (C4) test
7. Skin biopsy
8. Physical challenge

Treatment/Management

1. General measures such as minimization of aggravating factors and patient education
2. Pharmacologic agents
 - Antihistamines (cetirizine, desloratadine, fexofenadine, levocetirizine, loratadine and mizolastine, and acrivastine)
 - Antileukotrienes
 - Corticosteroids (routine use of topical steroids is not recommended)
 - Epinephrine
 - Immunomodulating therapies (cyclosporine, tacrolimus, mycophenolate mofetil, plasmapheresis, intravenous immunoglobulins, methotrexate, cyclophosphamide)
3. Other interventions (diet, nifedipine, thyroxine, sulfasalazine, dapsone, warfarin, tranexamic acid, stanozolol plus cetirizine, hydroxychloroquine, phototherapy, relaxation therapy)
4. Treatment of C1 esterase inhibitor deficiency
 - Anabolic steroids
 - C1 esterase inhibitor concentrate
 - Fresh frozen plasma
 - Tranexamic acid
5. Monotherapy versus combination therapy

MAJOR OUTCOMES CONSIDERED

- Specificity and sensitivity of diagnostic tests
- Time to resolution of or improvement in urticaria symptoms
- Side effects of pharmacotherapy

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Quality of Evidence

I: Evidence obtained from at least one properly designed, randomized controlled trial

II-i: Evidence obtained from well-designed controlled trials without randomization

II-ii: Evidence obtained from well-designed cohort or case-control analytical studies, preferably from more than one centre or research group

II-iii: Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of the introduction of penicillin treatment in the 1940s) could also be regarded as this type of evidence

III: Opinions of respected authorities based on clinical experience, descriptive studies or reports of expert committees

IV: Evidence inadequate owing to problems of methodology (e.g., sample size, or length of comprehensiveness of follow up, or conflicts in evidence)

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Strength of Recommendations

- A. There is good evidence to support the use of the procedure
- B. There is fair evidence to support the use of the procedure
- C. There is poor evidence to support the use of the procedure
- D. There is fair evidence to support the rejection of the use of the procedure
- E. There is good evidence to support the rejection of the use of the procedure

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Strength of recommendations (**A-D**) and quality of evidence (**I-IV**) and are defined at the end of the "Major Recommendations" field.

Clinical Classification

For clinical purposes it is often more helpful to classify urticaria by presentation than by aetiology, which is often difficult to establish. A classification based on clinical features may be used to guide appropriate investigation and management. It is usually possible to distinguish clearly recognizable patterns of urticaria on the clinical presentation, supported, where appropriate, by challenge tests and skin biopsy (see table below). The presentation of urticaria in childhood is similar to that in adults. Clinical and aetiological classifications should be complementary rather than exclusive: for example, chronic ordinary urticaria (COU) is most appropriate when the aetiology remains uncertain. Where there is evidence of histamine-releasing autoantibodies the patient has autoimmune COU (synonym, chronic autoimmune urticaria) but where there is no evidence of functional autoantibodies the patient has idiopathic COU (synonym, chronic idiopathic urticaria).

Table: Clinical Classification of the Urticarias

<p>Ordinary urticaria</p> <p style="padding-left: 40px;">Acute (up to 6 weeks of continuous activity)</p>

Chronic (6 weeks or more of continuous activity)

Episodic (acute intermittent or recurrent activity)

Physical urticarias (reproducibly induced by the same physical stimulus)

Mechanical

Delayed pressure urticaria

Symptomatic dermographism

Vibratory angio-oedema

Thermal

Cholinergic urticaria

Cold contact urticaria

Localized heat urticaria

Other

Aquagenic urticaria

Solar urticaria

Exercise-induced anaphylaxis

Angio-oedema without weals

Idiopathic

Drug-induced

C1 esterase inhibitor deficiency

Contact urticaria (contact with allergens or chemicals)

Urticarial vasculitis (defined by vasculitis on skin biopsy)

Autoinflammatory syndromes

Hereditary

Cryopyrin-associated periodic syndromes (CIAS1 mutations)

Acquired

Schnitzler syndrome

Aetiology

Despite thorough evaluation many cases remain unexplained ('idiopathic'), but it may be possible to assign a specific aetiology to individual cases of urticaria (see table below).

Table: Aetiologies of Urticaria

Idiopathic

Immunological

Autoimmune (autoantibodies against Fc-epsilon receptor I [Fc-epsilon RI] or immunoglobulin E [IgE])

Allergic (IgE-mediated type I hypersensitivity reactions)

Immune complex (urticarial vasculitis)

Complement-dependent (C1 esterase inhibitor deficiency)

Nonimmunological

Direct mast cell-releasing agents (e.g., opiates)

Aspirin, nonsteroidal anti-inflammatories and dietary pseudoallergens

Angiotensin-converting enzyme inhibitors

Appropriate Investigations

The diagnosis of urticaria is primarily clinical. Any investigations should be guided by the history and should not be performed in all patients. Relevant clinical and laboratory tests for the different clinical patterns of urticaria are summarized below.

Table: Relevant Investigations

	FBC	ESR	TA/TFT	IgE	C4	Skin Biopsy	Physical Challenge
Ordinary urticaria							
Acute/episodic	-	-	-	(+)	-	-	-
Chronic	(+)	(+)	(+)	-	-	-	-
Physical urticaria	-	-	-	-	-	-	+
Angio-oedema without weals	-	-	-	-	+	-	-
Contact urticaria	-	-	-	(+)	-	-	-
Urticarial vasculitis	+	+	-	-	+	+	-
Autoinflammatory syndrome	+	+	-	-	-	-	-

FBC, full blood count; ESR, erythrocyte sedimentation rate; TA, thyroid autoantibodies; TFT, thyroid function tests; IgE, specific IgE (chloramphenicol [CAP]) or skin prick tests; C4, component of complement as a marker for C1 esterase inhibitor (C1 inh) deficiency and in hypocomplementaemic urticarial vasculitis; (+), discretionary investigations.

Acute or Episodic Ordinary Urticaria

No investigations are required except where suggested by the history. IgE-mediated reactions to environmental allergens (such as latex, nuts or fish) as a cause of acute allergic or contact urticaria can be confirmed by skin-prick testing (where there are facilities) and CAP fluoroimmunoassay (previously radioallergosorbent tests, RAST) on blood. Results of both have to be interpreted in the clinical context. Single-blind oral challenge with food additives or aspirin may be appropriate in the evaluation of episodic urticaria in the appropriate clinical setting in centres where challenge capsules are available.

Chronic Ordinary Urticaria

No investigations are required for the majority of patients with mild disease responding to H1 antihistamines. A useful screening profile for nonresponders with more severe disease could include a full blood count and white cell differential (for instance, to detect the eosinophilia of bowel helminth infections or the leucopenia of systemic lupus erythematosus), and erythrocyte sedimentation rate (usually normal in chronic ordinary urticaria [COU] but may be raised in urticarial vasculitis and always raised in autoinflammatory syndromes). Thyroid autoantibodies and thyroid function tests should be performed, especially if an autoimmune aetiology of urticaria is likely. There is currently no routine laboratory test for histamine-releasing autoantibodies, but intradermal injection of autologous serum (the autologous serum skin test, ASST) offers a reasonably sensitive and specific screening test in centres with experience of doing it. The basophil histamine release assay remains the gold standard investigation for functional autoantibodies in centres where it is available.

Physical Urticarias

Physical urticarias may occur alone or coexist with ordinary urticaria. International standards for the diagnosis of physical urticarias and definitions of challenge testing have been proposed.

Angio-oedema Without Weals

Serum C4 should be used as an initial screening test for hereditary and acquired C1 esterase inhibitor (C1 inh) deficiency. A low C4 level between and during attacks (<30% mean normal) has a very high sensitivity but low specificity for C1 inh deficiency. If low, C1 inh deficiency can be confirmed by quantitative and functional C1 inh assays. Immunochemical and functional C1 inh are both low in type I hereditary angio-oedema (HAE) whereas only functional activity is low in type II HAE. C1q is also reduced in acquired C1 inh deficiency.

Urticarial Vasculitis

Lesional skin biopsy is essential to confirm the presence of small-vessel vasculitis histologically (leukocytoclasia, endothelial cell damage, perivascular fibrin deposition and red cell extravasation are key changes although there is no single defining feature). Patients with urticarial vasculitis need a full vasculitis screen, including serum complement assays for C3 and C4 to distinguish normocomplementaemic from hypocomplementaemic disease, which carries a worse prognosis.

Interventions

General Measures

Nonspecific aggravating factors, such as overheating, stress, alcohol and drugs with the potential to worsen urticaria (e.g., aspirin and codeine) should be minimized. The risk of cross-reactions between aspirin and nonsteroidal anti-inflammatory drugs (NSAIDs) is difficult to quantify but may relate to potency of cyclooxygenase inhibition and dose. NSAIDs should be avoided in aspirin-sensitive patients with urticaria. Angiotensin-converting enzyme (ACE) inhibitors should be avoided in patients with angio-oedema without weals and used with caution in urticaria if angio-oedema is also present. Oestrogens should be avoided in HAE. Cooling antipruritic lotions, such as calamine or 1% menthol in aqueous cream, can be soothing (**Quality of evidence III, Strength of recommendation A**). Clearly written information sheets, such as the British Association of Dermatologists' publication on urticaria and angio-oedema, can be very helpful to patients. It is important to explain to the patient that a cause of the condition is unlikely to be found but the prognosis for eventual recovery from ordinary, physical and vasculitic urticarias is excellent. Some physical urticarias may be especially persistent.

Pharmacological Agents

Antihistamines

All patients should be offered the choice of at least two nonsedating histamine-1 (H1) antihistamines because responses and tolerance vary between individuals **(Strength of recommendation A)**. It has become common practice to increase the dose above the manufacturer's licensed recommendation for patients who do not respond when the potential benefits are considered to outweigh any risks **(Quality of evidence III, Strength of recommendation C)**. 'Antiallergic' effects on mast-cell mediator release of possible clinical importance have been shown with cetirizine and loratadine, especially at higher doses. Adjustments to the timing of medication can be helpful to ensure that the highest drug levels are obtained when urticaria is anticipated. The use of sedating antihistamines as monotherapy is now less common because of concerns about reduced concentration and performance but they can be effective and well tolerated by some individuals. Doxepin has useful antihistaminic properties but has sedating and anticholinergic side-effects. Addition of a sedating antihistamine at night (e.g., chlorphenamine [chlorpheniramine] 4 to 12 mg, hydroxyzine 10 to 50 mg) to a nonsedating antihistamine by day may help patients sleep better although it probably has little additional clinical effect on urticaria if the H1 receptor is already saturated. The off-licence addition of a histamine-2 (H2) antihistamine, on the other hand, may sometimes give better control of urticaria than an H1 antihistamine taken alone **(Quality of evidence II, Strength of recommendation C)** although, in practice, it may be more helpful for dyspepsia that may accompany severe urticaria.

Renal impairment. Acrivastine should be avoided in moderate renal impairment (creatinine clearance 10 to 20 mL min⁻¹) and the dose of cetirizine, levocetirizine and hydroxyzine should be halved. Cetirizine, levocetirizine and alimemazine (trimeprazine) should be avoided in severe renal impairment (creatinine clearance <10 mL min⁻¹). Loratadine and desloratadine should be used with caution in severe renal impairment.

Hepatic impairment. Mizolastine is contraindicated by significant hepatic impairment. Alimemazine should be avoided in hepatic impairment because it is hepatotoxic and may precipitate coma in severe liver disease. Chlorphenamine and hydroxyzine should also be avoided in severe liver disease because their sedating effect is inappropriate.

Antihistamines in pregnancy. It is best to avoid all antihistamines in pregnancy, especially during the first trimester, although none has been shown to be teratogenic in humans. Hydroxyzine is the only antihistamine to be specifically contraindicated during the early stages of pregnancy in its current U.K. manufacturer's Summary of Product Characteristics. Avoidance or caution is recommended for the others, particularly in the first trimester and during lactation. Chlorphenamine is often chosen by clinicians in the U.K. when antihistamine therapy is necessary because of its long safety record. Loratadine and cetirizine are classified as U.S. Food and Drug Administration Pregnancy Category B drugs, implying there is no evidence of harm to the fetus during pregnancy, although well-controlled studies in humans are not available to exclude harmful effects.

Antihistamines in childhood. None of the currently licensed antihistamines is contraindicated in children 12 years and older. As dosing and age restrictions for

individual products vary in younger children, it is recommended that the relevant Data Sheets are consulted before prescribing.

Antileukotrienes

Antileukotrienes may be taken in addition to an H1 antihistamine for poorly controlled urticaria but there is little evidence that they are useful as monotherapy. They appear more likely to benefit aspirin-sensitive and autologous serum skin test-positive chronic ordinary urticaria than other patterns of urticaria but a good response is unpredictable. Montelukast is usually chosen.

Corticosteroids

Oral corticosteroids may shorten the duration of acute urticaria (e.g., prednisolone 50 mg daily for 3 days in adults) although lower doses are often effective. Parenteral hydrocortisone is often given as an adjunct for severe laryngeal oedema and anaphylaxis although its action is delayed. Short tapering courses of oral steroids over 3 to 4 weeks may be necessary for urticarial vasculitis and severe delayed pressure urticaria (**Quality of evidence III**) but long-term oral corticosteroids should not be used in chronic urticaria (**Strength of recommendation A**) except in very selected cases under regular specialist supervision.

Epinephrine (synonym adrenaline)

Intramuscular epinephrine can be life saving in anaphylaxis and in severe laryngeal angio-oedema but should be used with caution in hypertension and ischaemic heart disease. Dosing is weight dependent. The British National Formulary recommends 0.5 mL of 1 : 1000 (500 micrograms) epinephrine by intramuscular injection for adults and adolescents older than 12 years. Fixed-dose epinephrine pens delivering 300 ug for adults or 150 micrograms in children between 15 and 30 kg may be carried by patients for emergency self-administration if the history indicates that the individual is at risk of further life-threatening attacks. If after the first dose of epinephrine there is no significant relief of symptoms, a further dose should be given. Epinephrine is not considered helpful for angio-oedema caused by C1 inh deficiency (**Quality of evidence III**). There is currently no licensed epinephrine aerosol inhaler available in the United Kingdom (U.K.), although Primatene® Mist (Wyeth, Madison, NJ, U.S.A.) is available as a named patient import from the United States of America (U.S.A.) where it is licensed for asthma. It should be sprayed directly on to the affected area of the mouth rather than inhaled or used sublingually with the intention of achieving systemic absorption.

Immunomodulating Therapies

Ciclosporin has been the best studied immunosuppressive drug for chronic ordinary urticaria to date. It was effective in about two thirds of patients with severe autoimmune urticaria unresponsive to antihistamines at 4 mg kg⁻¹ daily for up to 2 months (**Quality of evidence I, Strength of recommendation A**) but only 25% of the responders remained clear or much improved 4 to 5 months later. In a recent large multicentre study, there were fewer therapeutic failures when ciclosporin was taken for 16 weeks than 8 weeks. Optimal patient selection,

dose and duration of treatment still need to be defined. Some patients with chronic urticaria without evidence of functional autoantibodies (with a negative ASST) also respond, although this is not well documented in the literature and a beneficial outcome from immunosuppressive treatment is less predictable. Similar overall responses have been seen in open studies of tacrolimus and mycophenolate mofetil. Plasmapheresis and intravenous immunoglobulins may also be effective in severe autoimmune chronic urticaria (**Quality of evidence II-ii**) but are expensive and not widely available.

Other Interventions

Although some food additives and natural salicylates may aggravate aspirin-sensitive chronic urticaria the value of avoidance is controversial. In one prospective open study of in patients with chronic urticaria, 73% of 64 improved within 2 weeks of a strict pseudoallergen diet but confirmed exacerbations on provocation testing with individual pseudoallergens were demonstrated in only 19% of them (**Quality of evidence III, Strength of recommendation B**). Oral sodium cromoglycate is not absorbed from the gastrointestinal tract and is not effective for urticaria. Nifedipine has been shown to reduce pruritus and wealing in idiopathic COU (**Quality of evidence II-i, Strength of recommendation C**), but the benefit in clinical practice is usually disappointing. Thyroxine treatment of euthyroid patients with idiopathic COU and with evidence of thyroid autoimmunity may occasionally result in improvement of urticaria (**Quality of evidence III, Strength of recommendation C**). Although the published evidence for using sulfasalazine or dapson in delayed pressure urticaria is anecdotal, they may be successful in otherwise corticosteroid-dependent cases. Sulfasalazine has also been reported to benefit idiopathic COU in a retrospective review (**Quality of evidence III, Strength of recommendation C**) but there is a risk of aggravating urticaria in aspirin-sensitive patients. Some patients with idiopathic COU have responded to warfarin (**Quality of evidence III, Strength of recommendation C**). Idiopathic angio-oedema without weals may respond to tranexamic acid (**Quality of evidence II-ii, Strength of recommendation B**). A double-blind randomized placebo-controlled study appeared to show a benefit from stanozolol with cetirizine over placebo with cetirizine (**Quality of evidence II-i, Strength of recommendation C**). Hydroxychloroquine improved the quality of life scores but did not reduce the requirement for other medication in patients with idiopathic COU. Psoralen photochemotherapy, ultraviolet B phototherapy and relaxation therapies for chronic urticaria have yielded inconsistent results (**Quality of evidence VI, Strength of recommendation D**) although narrow-band ultraviolet B phototherapy may be more promising. Using a very potent topical steroid in a foam vehicle on the most affected area has been reported for delayed pressure urticaria, and some immediate benefit was noted at the site of application of a potent topical steroid under occlusion for 2 weeks in patients with idiopathic COU, but the routine use of topical steroids is not recommended.

Treatment of C1 Esterase Inhibitor Deficiency

The management of C1 inh has been comprehensively reviewed (see Table 4 in the original guideline document). Maintenance therapy is only necessary for patients with symptomatic recurring angio-oedema or related abdominal pain. Anabolic steroids are the treatment of choice for most adults (**Quality of**

evidence III, Strength of recommendation B) but should be avoided in children if possible. Virilizing side-effects may occur even at the low doses needed for long-term maintenance. Regular monitoring for hepatic inflammation and hepatocellular adenomas is essential. Tranexamic acid may be used for maintenance but is contraindicated in patients with a history of thrombosis. Regular eye examinations and liver function tests are recommended by the manufacturer in the long-term treatment of HAE. Prophylaxis before planned surgery or dental procedures includes taking tranexamic acid 2 days before and afterwards or increasing the dose of established maintenance therapies with tranexamic acid or anabolic steroids. C1 inh concentrate should be given for emergency treatment of serious angio-oedema attacks or as prophylaxis before surgery, especially when intubation or dental extractions are necessary. Fresh frozen plasma may be used as a substitute in an emergency if C1 inh is not available.

Key Points

1. Urticaria can usually be classified on the clinical presentation without extensive investigation. The weals of physical urticaria usually last less than 1 h (except delayed pressure urticaria) whereas those of ordinary urticaria typically last from 2 to 24 h. Urticarial vasculitis should be sought by skin biopsy if weals last longer.
2. Urticaria often remains idiopathic after allergic, infectious, physical and drug-related causes have been excluded as far as possible. At least 30% of patients with the ordinary presentation of chronic urticaria appear to have an autoimmune aetiology. The autologous serum skin test is a reasonably sensitive and specific marker for histamine-releasing autoantibodies in this group.
3. Advice on general measures and information can be helpful for most patients with urticaria, especially if an avoidable physical or dietary trigger can be identified. Over 40% of hospitalized patients with urticaria show a good response to antihistamines, which are the mainstay of therapy.
4. It has become common practice to increase the dose of second-generation H1 antihistamines above the manufacturer's licensed recommendation for patients when the potential benefits are considered to outweigh any risks.
5. Combinations of nonsedating H1 antihistamines with other agents, such as H2 antihistamines, sedating antihistamines at night or the addition of antileukotrienes, can be useful for resistant cases.
6. Oral corticosteroids should be restricted to short courses for severe acute urticaria or angio-oedema affecting the mouth, although more prolonged treatment may be necessary for delayed pressure urticaria or urticarial vasculitis.
7. Immunomodulating therapies for chronic autoimmune urticaria should be restricted to patients with disabling disease who have not responded to optimal conventional treatments.

Definitions:

Quality of Evidence

I: Evidence obtained from at least one properly designed, randomized controlled trial

II-i: Evidence obtained from well-designed controlled trials without randomization

II-ii: Evidence obtained from well-designed cohort or case-control analytical studies, preferably from more than one centre or research group

II-iii: Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of the introduction of penicillin treatment in the 1940s) could also be regarded as this type of evidence

III: Opinions of respected authorities based on clinical experience, descriptive studies or reports of expert committees

IV: Evidence inadequate owing to problems of methodology (e.g., sample size, or length of comprehensiveness of follow up, or conflicts in evidence)

Strength of Recommendations

- A. There is good evidence to support the use of the procedure
- B. There is fair evidence to support the use of the procedure
- C. There is poor evidence to support the use of the procedure
- D. There is fair evidence to support the rejection of the use of the procedure
- E. There is good evidence to support the rejection of the use of the procedure

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for specific recommendations (see "Major Recommendations" field).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Accurate diagnosis of urticaria
- Urticaria symptom relief

POTENTIAL HARMS

Side effects of pharmacotherapy, including:

- Cetirizine (the active metabolite of hydroxyzine) may be sedating, especially at higher doses.

- Doxepin has useful antihistaminic properties but has sedating and anticholinergic side-effects.
- Intramuscular epinephrine can be life saving in anaphylaxis and in severe laryngeal angio-oedema but should be used with caution in hypertension and ischaemic heart disease.
- Anabolic steroids should be avoided in children if possible. Virilizing side-effects may occur even at the low doses needed for long-term maintenance. Regular monitoring for hepatic inflammation and hepatocellular adenomas is essential.

CONTRAINDICATIONS

CONTRAINDICATIONS

- Nonsteroidal anti-inflammatory drugs (NSAIDs) should be avoided in aspirin-sensitive patients with urticaria. Angiotensin-converting enzyme (ACE) inhibitors should be avoided in patients with angio-oedema without weals and used with caution in urticaria if angio-oedema is also present. Oestrogens should be avoided in hereditary angio-oedema (HAE).
- Mizolastine is contraindicated in clinically significant cardiac disease and when there is prolongation of the Q-T interval. It should not be taken concurrently with drugs that inhibit hepatic metabolism via cytochrome P450 (including macrolide antibiotics and imidazole antifungals) and with drugs that have potential arrhythmic properties (including tricyclic antidepressants, such as doxepin).
- Acrivastine should be avoided in moderate renal impairment (creatinine clearance 10 to 20 mL min⁻¹) and the dose of cetirizine, levocetirizine and hydroxyzine should be halved. Cetirizine, levocetirizine and alimemazine (trimeprazine) should be avoided in severe renal impairment (creatinine clearance <10 mL min⁻¹). Loratadine and desloratadine should be used with caution in severe renal impairment.
- Mizolastine is contraindicated by significant hepatic impairment. Alimemazine should be avoided in hepatic impairment because it is hepatotoxic and may precipitate coma in severe liver disease. Chlorphenamine and hydroxyzine should also be avoided in severe liver disease because their sedating effect is inappropriate.
- Hydroxyzine is the only antihistamine to be specifically contraindicated during the early stages of pregnancy in its current United Kingdom (U.K.) manufacturer's Summary of Product Characteristics. Avoidance or caution is recommended for the others, particularly in the first trimester and during lactation.
- Anabolic steroids are the treatment of choice for most adults but should be avoided in children if possible.
- Tranexamic acid may be used for maintenance but is contraindicated in patients with a history of thrombosis.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

These guidelines have been prepared for dermatologists on behalf of the British Association of Dermatologists and reflect the best data available at the time the report was prepared. Caution should be exercised in interpreting the data; the results of future studies may require alterations of the conclusions or recommendations in this report. It may be necessary or even desirable to depart from the guidelines in the interests of specific patients and special circumstances. Just as adherence to the guidelines may not constitute defence against a claim of negligence, so deviation from them should not necessarily be deemed negligent.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Audit Criteria/Indicators

Patient Resources

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Grattan CE, Humphreys F, British Association of Dermatologists Therapy Guidelines and Audit Subcommittee. Guidelines for evaluation and management of urticaria in adults and children. Br J Dermatol 2007 Dec;157(6):1116-23. [47 references] [PubMed](#)

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2007 Dec

GUIDELINE DEVELOPER(S)

British Association of Dermatologists - Medical Specialty Society

SOURCE(S) OF FUNDING

British Association of Dermatologists

GUIDELINE COMMITTEE

British Association of Dermatologists Therapy and Guidelines Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

None declared

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the [British Association of Dermatologists Web site](#).

AVAILABILITY OF COMPANION DOCUMENTS

Audit points are provided in the original guideline document.

PATIENT RESOURCES

The following is available:

- Urticaria and angioedema. Patient information leaflet. London (England): British Association of Dermatologists; 2006 Jan. 6 p. Available from the [British Association of Dermatologists Web site](#).

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

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