Ashford and St. Peter's Hospitals NHS
NHS Foundation Trust

PAEDIATRIC URTICARIA GUIDELINE

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Ratified by: Paediatric Guidelines Group

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Next Review Date:

References:

- RCPCH Allergy Care Pathways for Children Urticaria/Angio-oedema/Mastocytosis https://www.rcpch.ac.uk/sites/default/files/RCPCH_Care_Pathway_for_Children_with_Urticaria_Angio-oedema_or_Mastocytosis.pdf
- https://www.rch.org.au/clinicalguide/guideline_index/Urticaria/
- NICE guidelines for management of urticaria https://cks.nice.org.uk/urticaria#!scenario
- https://www.bsaci.org/Guidelines/chronic-urticaria-and-angioedema

This guideline is intended for use in A&E and general paediatric OPD to assist with the management of urticaria in children aged 6 months-18 years.

Definitions

Urticaria: Urticaria is a superficial swelling of the skin (epidermis and mucous membranes) that results in a red (initially with a pale centre), raised itchy rash or wheal formation. It can be acute or chronic depending on its duration.

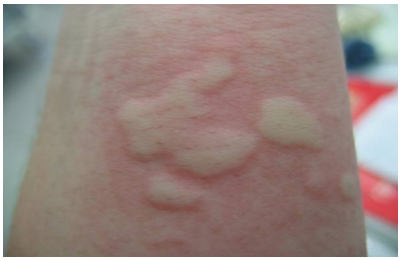


Fig 1: Urticarial Rash

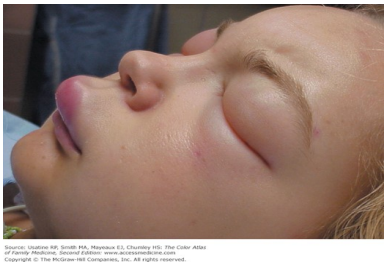


Fig 2: Angioedema

Angioedema: Angioedema is a deeper form of urticaria with swelling in the dermis, submucosal or subcutaneous tissues, often affecting face (lips, tongue, eyelids), genitalia, hands, or feet. Urticaria and angioedema can co-exist but either can occur separately. In children, 50-80% of those with chronic urticaria have accompanying angioedema.

Prevalence: Acute urticaria: More prevalent, affecting 4.5 – 15% of children in the UK.

Chronic urticaria: Less prevalent, affecting 0.1-3% of children in the UK.

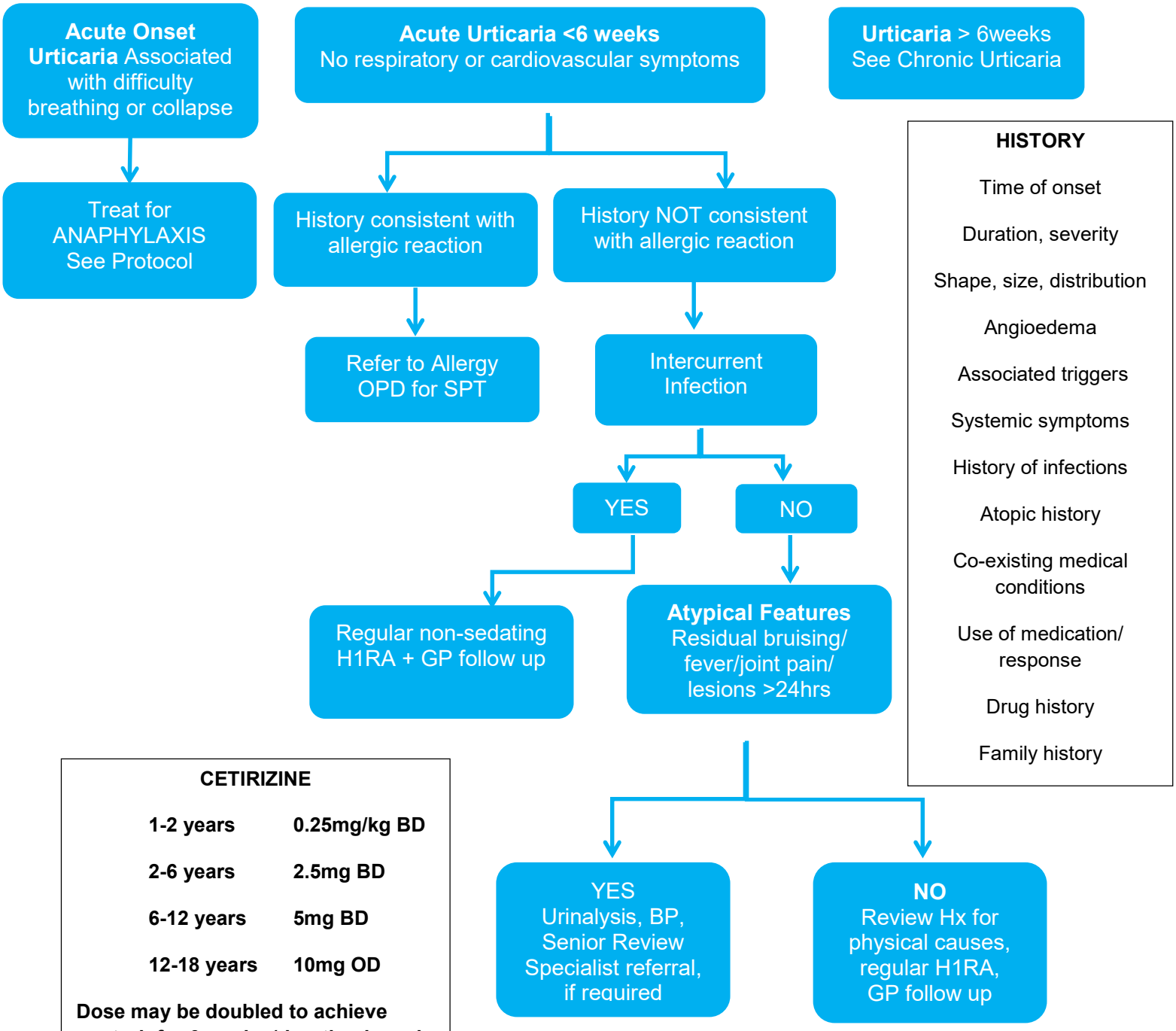
Acute Spontaneous Urticaria – an urticarial rash occurring for < 6 weeks.

It is usually self-limiting, short-lived and occur spontaneously or in response to a trigger. Some of the known factors/ triggers can be:

- Viral infection
- Stress, Exercise
- Drugs: such as penicillin, aspirin, cefaclor, NSAIDS and vaccination
- Insect bites and stings
- Food (such as milk, eggs, peanuts, tree nuts, shellfish etc)
- Contact Allergens (latex, animal, plants)
- Physical triggers (pressure, cold, exercise, rarely water)

Note that food allergies present within 15min-1 hour of ingestion of the food. If the child woke up with the rash, it is not a food allergy and more likely a viral urticaria

MANAGEMENT OF ACUTE URTICARIA



HISTORY

- Time of onset
- Duration, severity
- Shape, size, distribution
- Angioedema
- Associated triggers
- Systemic symptoms
- History of infections
- Atopic history
- Co-existing medical conditions
- Use of medication/ response
- Drug history
- Family history

CETIRIZINE

1-2 years	**0.25mg/kg BD**
2-6 years	**2.5mg BD**
6-12 years	**5mg BD**
12-18 years	**10mg OD**

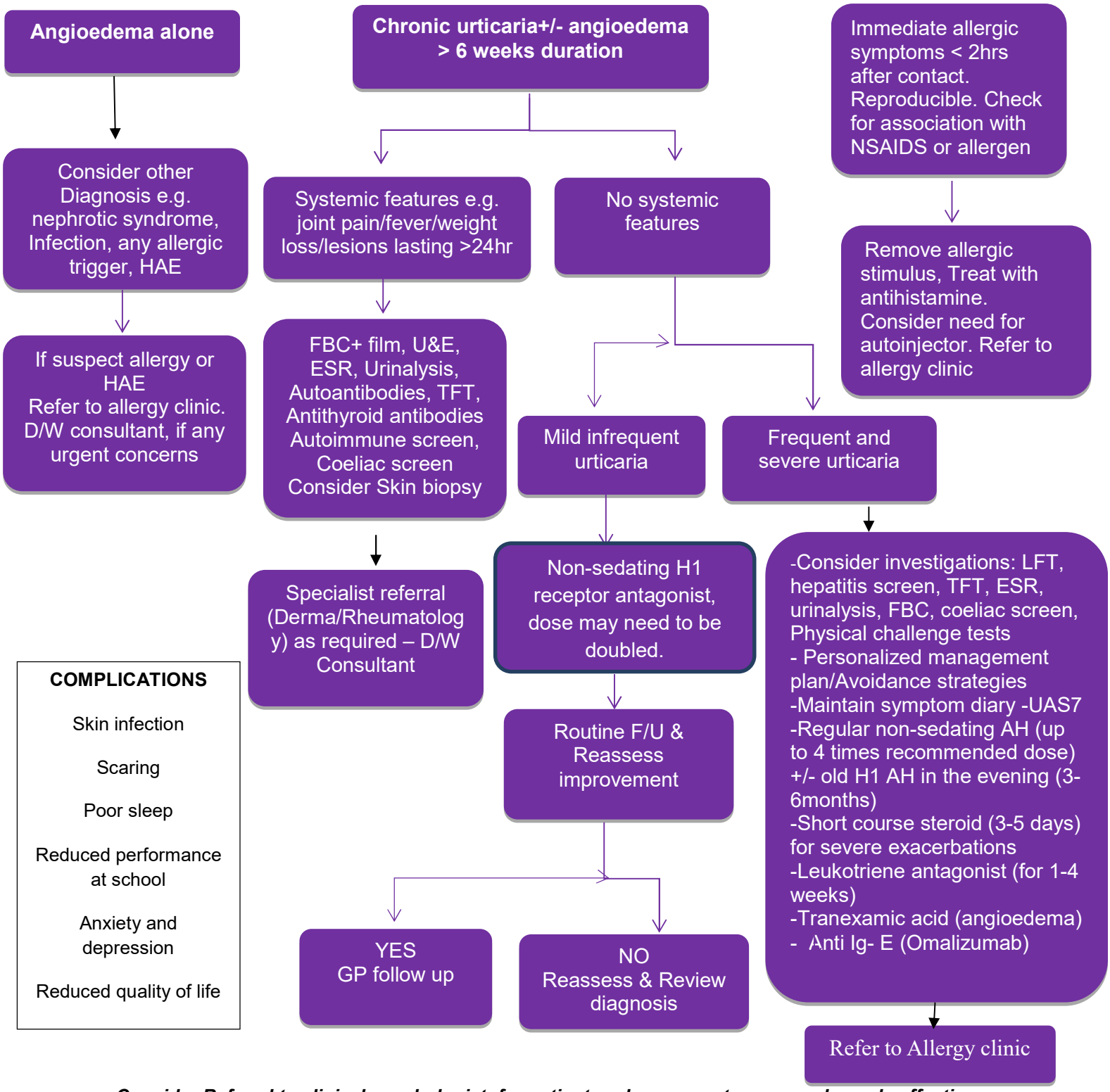
Dose may be doubled to achieve control- for 6 weeks (duration based on clinical judgment)

Steroids should not be routinely

If avoidable triggers are identified, give clear instructions on avoidance strategies before discharge

Prognosis: Excellent, most children respond well to standard treatment and do not need admission

MANAGEMENT OF CHRONIC URTICARIA



COMPLICATIONS

Skin infection

Scaring

Poor sleep

Reduced performance at school

Anxiety and depression

Reduced quality of life

Consider Referral to clinical psychologist- for patients, whose symptoms are adversely affecting their quality of life and causing significant social and psychological problems

Chronic Urticaria – an urticarial rash occurring on most days for > 6 weeks. It can be:

1- Chronic spontaneous urticaria*:* No known external cause. However, it may be aggravated by heat, stress, certain drugs or infection.

2- Autoimmune urticaria: 30-50% of chronic urticaria cases and may be associated with other autoimmune conditions (e.g. thyroiditis, coeliac disease)

3- Chronic inducible urticaria (CINDU): occurs in response to physical stimulus. It can be

- Aquagenic urticaria (after contact with hot or cold water)
- Cholinergic urticaria (after active or passive warming e.g. from exercise or emotion)
- Cold urticaria (after exposure of skin to cold)
- Heat urticaria (after exposure of skin to heat)
- Symptomatic dermatographism (itchy and/or burning skin and the development of strip-shaped weal due to shear force acting on skin).
- Delayed pressure urticaria (after application of sustained pressure e.g. after sitting or lying or due to tight clothing)
- Solar urticaria (after visible or UV light exposure)
- Vibratory angioedema (after exposure to vibration e.g. from use of vibratory tools)
- Contact urticaria (After contact with eliciting agent)

Indications for Referral to Specialist:

- Individual lesions persist> 24 hours
- Lesions leave bruising/staining after resolution
- Fever, pain, or other constitutional symptoms are associated
- Elevated ESR/abnormal urinalysis
- Raised ANA

Prognosis:

Chronic urticaria: Reassure parents - not a severe disease, may remit and relapse

25% of children with CSU are disease free 3 years after presentation and 96% after 7 years.

URTICARIA ACTIVITY SCORE- UAS7 Proforma
https://www.bidermato.com/wp-content/uploads/2018/04/UAS7-Questionnaire-EN.pdf