STANDARD TREATMENT WORKFLOW (STW)

Urticaria and Angioedema

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**STANDARD TREATMENT WORKFLOW (STW)**

**URTICARIA AND ANGIOEDEMA**

**URTICARIA-CLINICAL APPEARANCE**
- **Urticaria** - sudden appearance of wheals, angioedema, or both
- **A wheal** - A sharply circumscribed superficial central swelling of variable size and shape, surrounded by reflex erythema
  - Associated with itching/burning sensation and of fleeting nature; resolves within 1-24 hours
  - Chronic urticaria implies duration for more than 6 weeks
- **Angioedema** - Sudden, pronounced, erythematous or skin-colored swelling of lower dermis and subcutis with frequent involvement of mucous membranes
  - Associated pain, rather than itching/resolution is slower and can take up to 72 hours

**CLASSIFICATION OF CHRONIC URTICARIA SUBTYPES**
- **Chronic spontaneous** - Spontaneous appearance of wheals, angioedema, or both for ≥6 weeks
- **Inducible (mostly physical)** - Symptomatic dermatographism
  - Delayed pressure urticaria
  - Cholinergic urticaria
  - Cold/Heat urticaria
  - Solar urticaria
  - Aquagenic urticaria
  - Contact urticaria

**HISTORY**
- **Time to onset**
- **Frequency / duration**
- **Diurnal variation**
- **Associated angioedema**
- **Associated pain, itch**
- **Induction by physical agents or exercise**
- **Family history**
- **Previous allergies**
- **Surgical implantations**
- **Gastric / intestinal problem**

**EXAMINATION**
- **Due to evanescent nature the examination may not show any lesions**
- **Presence of wheals of various sizes and shapes**
- The lesions are non-scaly but show an intense erythema and a trailing clearing region in older areas which may lead to a target configuration in expanding plaques

**ICD-10-L50.9**
- Drug history
- Correlation with food
- Correlation with menses
- Smoking
- Work profile
- Hobbies
- Stress
- Quality of life impact
- Response to therapy
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Standard Treatment Workflow (STW) URTICARIA AND ANGIOEDEMA ICD-10-L56.9

URTICARIA - CLINICAL APPEARANCE

- Urticaria: sudden appearance of wheals, angioedema, or both
  - A wheal: A sharply circumscribed superficial central swelling of variable size and shape, surrounded by reflex erythema
  - Associated with itching/burning sensation and of fleeting nature; resolves within 1-24 hours
  - Chronic urticaria implies duration for more than 6 weeks

ANGIOEDEMA

- Sudden, pronounced, erythematous or skin-colored swelling of lower dermis and subcutis with frequent involvement of mucous membranes
- Associated pain, rather than itching, resolution is slower and can take up to 72 hours

CLASSIFICATION OF CHRONIC URTICARIA SUBTYPES (persisting with wheals, angioedema, or both)

- Chronic spontaneous
  - Inducible (mostly physical)
  - Spontaneous appearance of wheals, angioedema, or both
  - Symptomatic dememosphism
  - Delayed pressure urticaria
  - Cholinergic urticaria
  - Cold/hot urticaria
  - Solar urticaria
  - Aquagenic urticaria
  - Contact urticaria

HISTORY

- Time to onset
- Frequency/duration
- Initial sensations
- Associated angioedema
- Associated pain, itch
- Induction by physical agents or exercise
- Family history
- Previous allergies
- Surgical interventions
- Castric/intestinal problem
- Drug history
- Correlation with food
- Correlation with menses
- Smoking
- Work profile
- Stress
- Quality of life impact
- Response to therapy

EXAMINATION

- Due to evanescent nature the examination may not show any lesions
- Presence of wheals of various sizes and shapes
- The lesions are non-scaly but show an intense erythema and a trailing clearing region in older areas which may lead to a target configuration in expanding plaques

DIFFERENTIAL DIAGNOSES OF URTICARIA

- Insect/bite injury
- Urticarial vasculitis painful, persist for 24-48 hours and fade to leave bruising
- Fever and malaise
- Pre-bullous phase of bullous pemphigoid
- Maculopapular drug/ viral rash

INVESTIGATIONS

- Generally, no investigations are needed to confirm the diagnosis
- Skin biopsy may be indicated if other diagnoses are being suggested
- Cx and Cl inhibitor quantitation to detect CI inhibitor deficiency may be done in suspected hereditary angioedema (angioedema without urticaria)
- Tests for current or past viral (bacterial or parasitic) infections should be guided by history and clinical findings
- Lab tests may be needed if patient is planned for immunosuppressive treatment
- Certain investigations that are often ordered, but are of limited utility
  - Throat function tests and antinuclear antibodies (ANA) antibodies
  - Autoimmune profile skin test (ASST)
  - Skin prick/specific IgE test

TREATMENT

TREATMENT OF URTICARIA/ANGIOEDEMA AT PRIMARY CARE LEVEL

First Line
2nd generation non-sedating antihistamines

If symptoms persist offer 2 weeks
Increase dosage (up to fourth of) of 2nd generation antihistamines

If symptoms persist after 2-4 further weeks
Refer to higher centre

TREATMENT OF URTICARIA/ANGIOEDEMA AT SECONDARY CARE LEVEL

First Line
2nd generation antihistamines
If symptoms persist after 2 weeks
Increase dosage (up to fourth of) of 2nd generation antihistamines

If symptoms persist after 2-4 further weeks
Add third line to on second line:
Cyclosporine (1.5 mg/kg or Methylprednisolone 10 mg/kg)
Short course (max 10 days) of corticosteroids
(Prednisolone 0.5-0.5 mg/kg)

TREATMENT OF URTICARIA/ANGIOEDEMA AT TERTIARY CARE LEVEL

First Line
2nd generation antihistamines
If symptoms persist after 2 weeks
Increase dosage (up to fourth of) of 2nd generation antihistamines

If symptoms persist after 2-4 further weeks
Add third line to on second line:
Cyclosporine (1.5 mg/kg or Methylprednisolone 10 mg/kg)
Short course (max 10 days) of corticosteroids
(Prednisolone 0.5-0.5 mg/kg)

REFER TO A HIGHER CENTRE

- Patients whose urticaria is difficult to control with antihistamines despite fourfold higher dosage than the licensed doses of Cetirizine, Levocetirizine or Fexofenadine
- Patients with polypharmacy
- Unusual urticaria, e.g. long lasting lesions
- >24-48 hours with bruising
- Associated angioedema that is unresponsive or presents with choking/dyspnoea
- Investigations not available

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