



Urticaria (hives) are skin rashes characterized by diffuse, transient, raised, edematous and erythematous plaques called wheals.

Wheals are often pruritic, and can be accompanied by a burning sensation

PRESENTATION

Wheals

- Well-demarcated papules or plaques
- Pink with central pallor and edematous base
- Variable size and shape (round, rings, map-like), any location
- Asymmetrical, non-predictive migration
- Lesions last for min-24 hours, resolves without leaving a mark

PHYSICAL EXAM



ETIOLOGY

Acute (< 6 weeks):

- Often **non-allergic**
- Idiopathic
- Viral infection
- Medications (antibiotics, NSAIDs, opioids, radiocontrast)
- Food and food additives
- Insect bites and stings
- Vaccines
- Bacterial and parasitic infection (less common)

Chronic (> 6 weeks):

- Idiopathic
- Physical stimuli (heat, pressure)
- Emotional stimuli (stress)
- Autoimmune (Lupus, Thyroid disease)
- Infections
- Malignancy

DIAGNOSIS

*Clinical diagnosis in most cases

- HPI:** onset, location, duration, relieving and aggravating factors, recent exposure to triggers
- ROS:** symptoms of underlying causes (i.e. itch, fever, weight changes, heat/cold intolerance)
- PMHx:** allergy and atopic history, medications, recent travel, history of infection, FHx, SHx

Investigations:

*if an underlying disorder is suspected



Red Flags (painful urticaria > 24hrs):

- Fever, lymphadenopathy, jaundice, cachexia ☐ **systemic illness**
- Hyperpigmented lesions, ulcers, or painful urticaria for > 24 hours ☐ **urticarial vasculitis**
- Stridor, wheezing, or respiratory distress ☐ **risk of airway obstruction**

Angioedema:

Swelling of the face, lips, tongue or oropharynx



MANAGEMENT

- Avoid triggers/stop offending medication**
- Non-sedating antihistamines** (i.e. cetirizine).
 - Dose can be up-titrated to 4x the standard dose if symptoms remain at 2 to 4 week intervals.
- Systemic corticosteroids (i.e. prednisone) for chronic urticaria, but generally not indicated *avoid long-term use
- Consider biologics (i.e. omalizumab) in conjunction with allergist/immunologist for refractory, chronic urticaria
- Angioedema:** C1 inhibitor replacement, refer as needed
- Anaphylaxis:** **IM epinephrine**, monitor airway, intubate immediately if signs of obstruction. Monitor 4-6hrs for biphasic reactions. If refractory, epinephrine infusion and pressors. *Adjunctive measures:* H1 & H2 blockers

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Alexa Moschella, (Medical Student, University of Ottawa), Dr. Carmen Liy-Wong (Dermatologist, Children's Hospital of Eastern Ontario) for www.pedscases.com