Urticaria
(Hives, Nettle rash or Weals)
Introduction
Classification - acute
- chronic
Brief pathophysiology
Clinical presentation
Management

**Angioneurotic edema**
Types of Angioneurotic edema

**Purpura**
Urticaria       vs       Vasculitis

purpura
URTICARIA

- Erythematous/edematous swelling
- Dermis
- Transient
- Usually associated with itching
Classification

• Acute (less than 6 weeks duration)

• Chronic (more than 6 weeks to 3 months)

• Immune complex urticaria

• Physical
• **Acute Urticaria**
  (less than 6 weeks duration)

**Drugs-Antibiotics**
- Penicillin
- Tetracycline
- Cephalosporin
- Sulphonamides

**NSAIDS**
- Neuropeptides, subs. P
- Morphine, codeine
- Radiocontrast Medium

**Foods**
- Strawberries
- Cheese
- Chocolates

**Idiopathic**
Pathophysiology

Type I hypersensitivity

Linkage of 2 adjacent IgE receptors on mast cell by Ag

\[\downarrow\]

Mast cell activation

\[\downarrow\]

Releases Histamine/mediators from receptors

\[\downarrow\]

Weals
Clinical features

• Any age group

• Anywhere on body

• Itchy erythematous macules, weals (Pale, pink, oedematous, raised skin)

• Variable in number
  size
  shape (annular, serpiginous, bizarre)
Acute Urticaria
• Transient – last a few hours
resolve within 24 hours

• On resolving skin is normal
• Systemic complaints
  Malaise
  Headache
  Vomiting
  Diarrhoea
  Abdomen pain
  Arthralgia
  Dizziness/syncope
In children-

- More acute
- Less itchy
- More tendency to purpura
• May be assoc. with angioedema
• Mucosal swelling (angioedema)
  – buccal mucosa, tongue, pharynx & larynx
Chronic Urticaria

Weals present on most of days for a period >6 weeks

Cause rarely identified

- Idiopathic
- Auto-immune
Chronic Urticaria
Provoking factors

- Drugs
- Penicillin, NSAID’s
- Foods/food additives
- Infection
- Dental
- Inhalants
Systemic Diseases

- Collagen vascular diseases
- Thyroid DS
- Sarcoidosis
- Pregnancy
- Psychological stress
Natural History:

resolves in 6 weeks
Management

- Explanation

- Non specific measures to provoke agents
  - $H_1$ Antihistamines
    - I Generation
    - II Generation
Management

Resistant Cases

- Combination of $H_1$ & $H_2$ antihistamines
- Oral steroids in severe cases
- Cyclosporine
- If laryngeal oedema – adrenaline
Physical Urticaria

Physical stimulus
- Heat
- Cold
- Exercise

Reproducible wealing

Dermographism
Factitious urticaria involving triple response

- Young adults
- Severe itching, more at night

**Treatment**

Antihistamines

PUVA
Cholinergic Urticaria

- Small weals
- With sweating
  - Increase in temp.
  - Emotion
  - Gustatory
- In adolescence
Angioneurotic oedema/
Angioedema

Manifestation of urticaria

- Transient swelling
- Deeper dermis subcutaneous submucosal tissue
- Any part
  - lips
  - eyelids
  - genitalia
- Sudden onset
- Itching usually absent
Angioneurotic oedema
- Lasts few hours to 2-3 days

- **Treatment**
  
  Same as chronic urticaria
ACE inhibitor induced Angioedema

After 3 weeks of treatment but can occur at any time during treatment

**TREATMENT** - Stop ACE inhibitor
Hereditary Angioedema

Deficiency of natural inhibitor of C1 esterase
Rare AD transmission
Family history present
Onset childhood
Recurrent swellings
Associated with nausea
vomiting
colic/urinary symptoms

Treatment
Androgens/Anabolic drugs – Stanazolol
Fresh frozen plasma
Purified inhibitor
Purpura

Discoloration of skin / mucus membranes due to extravasation of R.B.C.
Purpura

<2mm - petechiae

>2mm - ecchymosis
Classification of purpura

- **Platelet disorders** (Thrombocytopenia)
  - Defective production
  - Decreased survival
  - Excessive consumption

- **Vascular or nonthrombocytopenic**
  - Physical-coughing
  - Senile
  - Scurvy
  - Toxic purpura
Clinical Classification

- Palpable
- Nonpalpable

Treatment-

Treatment of cause