# Urticaria

(Hives, Nettle rash or Weals)

Introduction
Classification - acute
- chronic
Brief pathophysiology
Clinical presentation
Management

Angioneurotic edema
Types of Angioneurotic edema

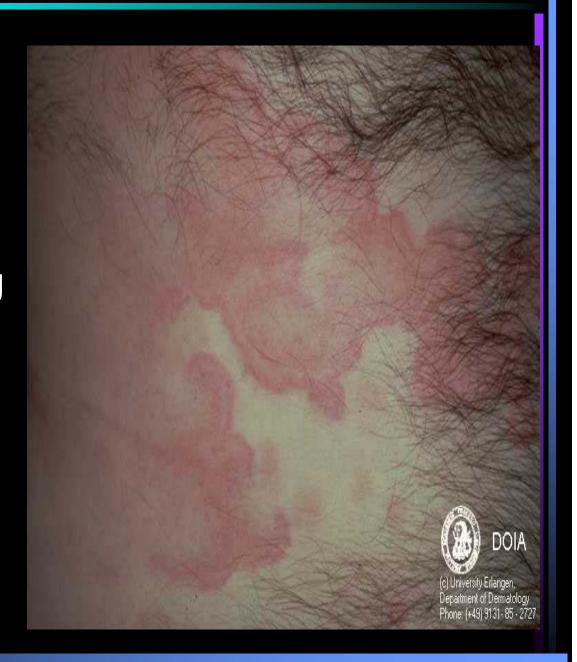
**Purpura** 

# 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

Mast cell activation

Releases Histamine/mediators from receptors

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)



• Transient – last a few hours resolve within 24 hours

• On resolving skin is normal

• Systemic complaints

Malaise

Headache

Vomiting

Diarrhoea

Abdomen pain

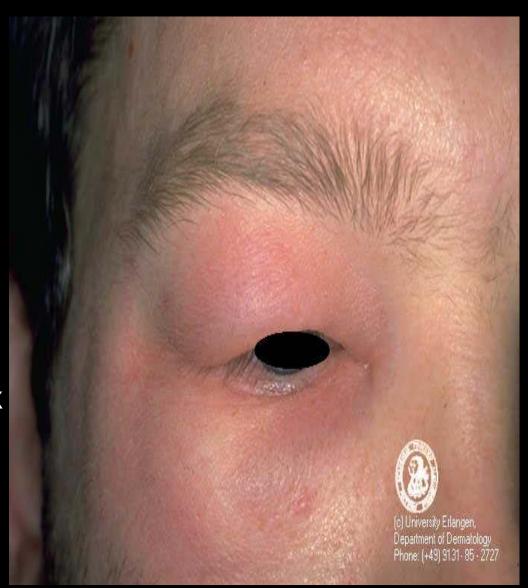
Arthralgia

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
- ↓ provoking agents
- H<sub>1</sub> Antihistamines
  - -I Generation
  - -II Generation

# Management Resistant Cases

- Combination of H<sub>1</sub>& H<sub>2</sub> 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



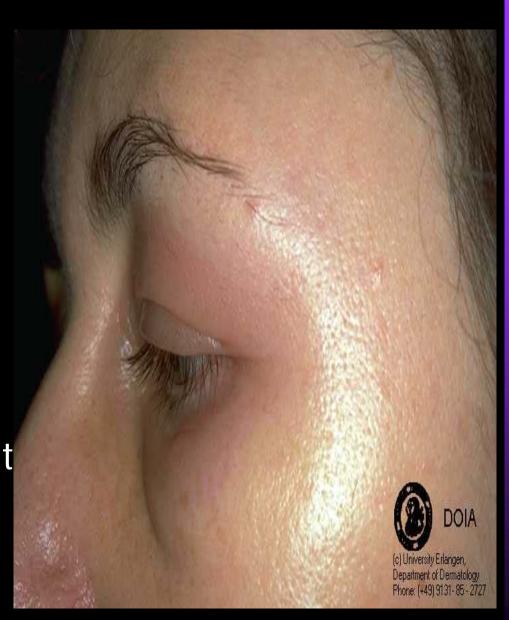
-Any part lips

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