

# 13 Dermatology

## Target Lesions

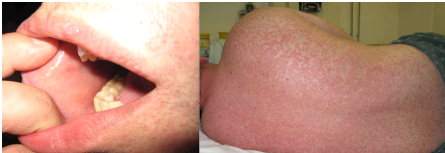
- Erythema multiforme
- Erythema marginatum
- SJS/TENS
- Fixed drug eruptions
- Melanocytic naevus
- Urticaria
- Subacute cutaneous Lupus
- Pemphigoid: paraneoplastic, bullous
- Vasculitis eg Kawasaki
- Trauma eg from a ball

## VIRAL EXANTHEMS

### MSR-ER

1 <sup>st</sup>	Measles	4 <sup>th</sup>	NA
2 <sup>nd</sup>	Scarlet Fever (Strep A)	5 <sup>th</sup>	Erythema Infectiosum
3 <sup>rd</sup>	Rubella	6 <sup>th</sup>	Roseola (herpes)

### 1. Measles



- Signs: cough, fever, conjunctivitis, rash
- Rash
  - maculopapular
  - morbilliform (macular 2-10mm)
  - confluent in areas
  - non-purpuric
  - starts at hairline
- Koplik spots in mouth (before rash)

### Complications

- ENT: OM, sinusitis
- Resp: Pneumonitis, bronchiolitis
- 2ry bacterial eg pneumonia
- Diarrhoea
- Serious
  - Encephalitis
  - Transverse myelitis
  - Myocarditis
  - Teratogenic = still birth
  - Hepatitis

### Management

- Notifiable disease
- Isolation until Day 4 rash
- Confirm with IgM & IgG
- Seek & Treat complications

### 2. Scarlet Fever



- Due to GAS
- Sudden fever
- Sore throat, headache, lymphadenopathy, rash
- Rash
  - Sandpaper (sunburn with goose bumps)
  - Strawberry tongue
  - Peri-oral sparing
  - Pastia lines in skin folds (esp armpits & elbows)
  - NOT itchy
- 5-15yo
- Oral
  - Strawberry tongue
  - Forcheimer spots on soft palate (DDx rubella)

### Diagnosis

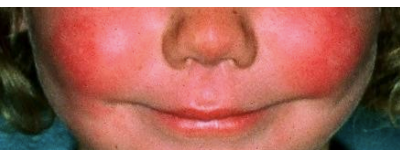
- same as Rheumatic Fever
- Throat swab culture
- Rapid streptococcal antigen test (post pharynx)
- Anti-DNase B & Antistreptolysin-O titres (ASOT)

### 3. Rubella

aka "3-day measles"

- Benign disease except in pregnant/neonates (TORCH)
- Can cause stillborn
- Rash very non-specific
- Can have Forcheimer spots (DDx scarlet fever)

### 5. Erythema Infectiosum



- Mild fever, headaches
- Rash
  - D3 Slapped cheek
  - D5 Lacey rash on limbs & trunk
  - Lasts up to 6 weeks

### 6. Roseola Infantum



- Age 6m-3y
- High fever, rhinorrhoea, irritable, tired
- Rash: After fever goes
  - Trunk/Face
  - Rose-pink 2-5mm
  - Non-pruritic

### Other Disease

- Varicella
- Coxsackie A16 = Hand, Foot & Mouth (HFMD)
- EBV
- (L) Erythema Marginatum = Rheumatic Fever
  - annular erythema ie target lesions
  - NEVER on face, palm, soles
- (R) Erythema multiforme (see below for more)



## PURPURIC RASHES

- due to haemorrhage of small vessels
- common ecchymosis (bruise), petechiae sinister
- Mx depends on cause

### Causes

- Thrombocytopenia
  - Primary
  - Secondary
    - Drugs: heparin, NSAIDs, aspirin
    - Infection: EBV, CMV, meningococcal
- Other coagulation disorder
  - SIC (sepsis induced coagulopathy)
  - Snake bite
  - Warfarin induced necrosis
- Vascular disorders
  - Intraluminal pressure eg Valsalva
  - Deficient vascular support eg aged skin or sun
  - Vasculitis eg HSP, Kawasaki, EDS, Sjogrens
  - Leukemia

## ERYTHEMATOUS RASHES

### Erythema Multiforme

- Hypersensitivity reaction triggered by infection or drugs
- Mx: Symptomatic eg topical steroids, antihistamines
- Rash: Target lesions, Maculopapular, Itch uncommon

### Types

- EM major: MM involved
- EM minor: no MM involved

### Causes

- HSV, Mycoplasma (most common)
- Other viruses: adeno, zoster, hepatitis, HIV, CMV, viral vacc
- Drugs eg Phenytoin, NSAIDs (need to rule out SJS/TEN)
- Physical: sunlight, cold, radiation, malignancy

### Erythema Nodosum

- Panniculitis
- Rash: Red bruising to shins
- Management
  - Treat co-infection
  - Compression
  - Anti-inflammatories
  - TCAs for pain

## EXFOLIATIVE RASHES

### Erythroderma (Red Man Syndrome)

- Exfoliating dermatitis from
  - Eczema 40%
  - Psoriasis 22%
  - Drugs 15%
- High TBSA maculopapular exfoliating rash

### Complication

- Dehydration
- AKI
- DVT
- High output cardiac failure
- Protein loss oedema
- Infection

### Management

- Supportive
- Oil baths
- ABx
- 50% soft/liquid paraffin
- Seek & treat complications

### Scalded Skin Syndrome

- Uncommon *s. aureus* infection
- Usually < 5yo (antibodies strong after this)
- Rash
  - Exfoliating
  - Looks like a scald
- Mx
  - Flucloxacillin
  - Mx complications (same as ED)

## KILLER RASHES

### SJS & TEN

- Forms a spectrum:
  - SJS (< 10% TBSA)
  - TEN (> 30% TBSA)
- MM ulceration ≥ 2 sites is classic

### Causes & Risk Factors

- Drugs: NSAIDs, sulphonamides, anticonvulsants, illicit
- HIV (100x more common)

### Mx

- Remove trigger
- Consult Burns, ICU, ophthal
- Steroids +++
- Same as burns eg fluids, nutrition, pressure mx

### Prognosis

- Based on SCORTEN severity score
- Overall mortality 10% SJS, 30% TEN

Sugar	> 14	Mortality
HCO <sub>3</sub>	< 20	≤ 1 = 3.2%
Old age	>40yo	2 = 12.1%
Raised BUN	> 10	3 = 35.3%
Tachycardia	> 120	4 = 48.3%
Epi detachment	> 10% Dq	≥ 5 = 90%
Neoplasia		

### DRESS

- Drug related but with systemic symptoms
- Hepatitis & Eosinophilia are early features
- AKI, ARDS, Pancreatitis, encephalitis

## VESICULAR & BULLOUS RASHES

### Pemphigus

- (painful)
- autoimmune intra dermal blistering disease
- Nikolsky +ve (exfoliating)
- Painful NOT itchy
- Mx: high dose steroids

### Pemphigoid

- (itchy, large)
- autoimmune sub-dermal blistering disease
- > 80y
- Large bullae, VERY itchy
- Steroids: top, oral, abx, analgesia
- Better prognosis

### Herpes Zoster (shingles)

- Does not cross midline (can cross dermatomes)
- Management
  - Aim pain, duration, viral shedding, ocular
  - < 72hrs
  - Valaciclovir 1g TDS 7 days
  - Aciclovir (in preg) 800mg x5 per day 7 days

### Impetigo (School Sores)

- Honey coloured crusts esp face, elbow, knees
- Staph
- Mx: mupirocin 2% ointment TDS, Flucloxacillin if multi