Rash, pruritus and mouth ulcers- IM teaching

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IM Syllabus
Dermatology

Presentations

Mouth ulcer

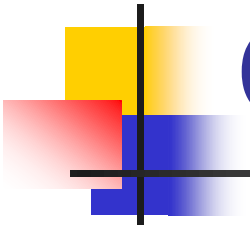
Pruritus

Rash

Skin lesions

Conditions/ issues

- Blood and lymphatic vessel disorders
- Cutaneous reactions to drugs
- Cutaneous vasculitis, connective tissue diseases and urticaria
- Dermatitis / eczema
- Disorders of pigmentation
- Hair and nail disorders
- Infections of the skin and soft tissues
- Inherited skin diseases
- Papulosquamous diseases
- Photosensitivity
- Sebaceous and sweat gland disorders
- Skin in systemic disease
- Tumours of the skin
- Blistering disorders



Overview

- I hour 15 mins
- 3 sections in turn
- MCQs after each section
- Case scenarios as we go along
- Group work

Pruritus

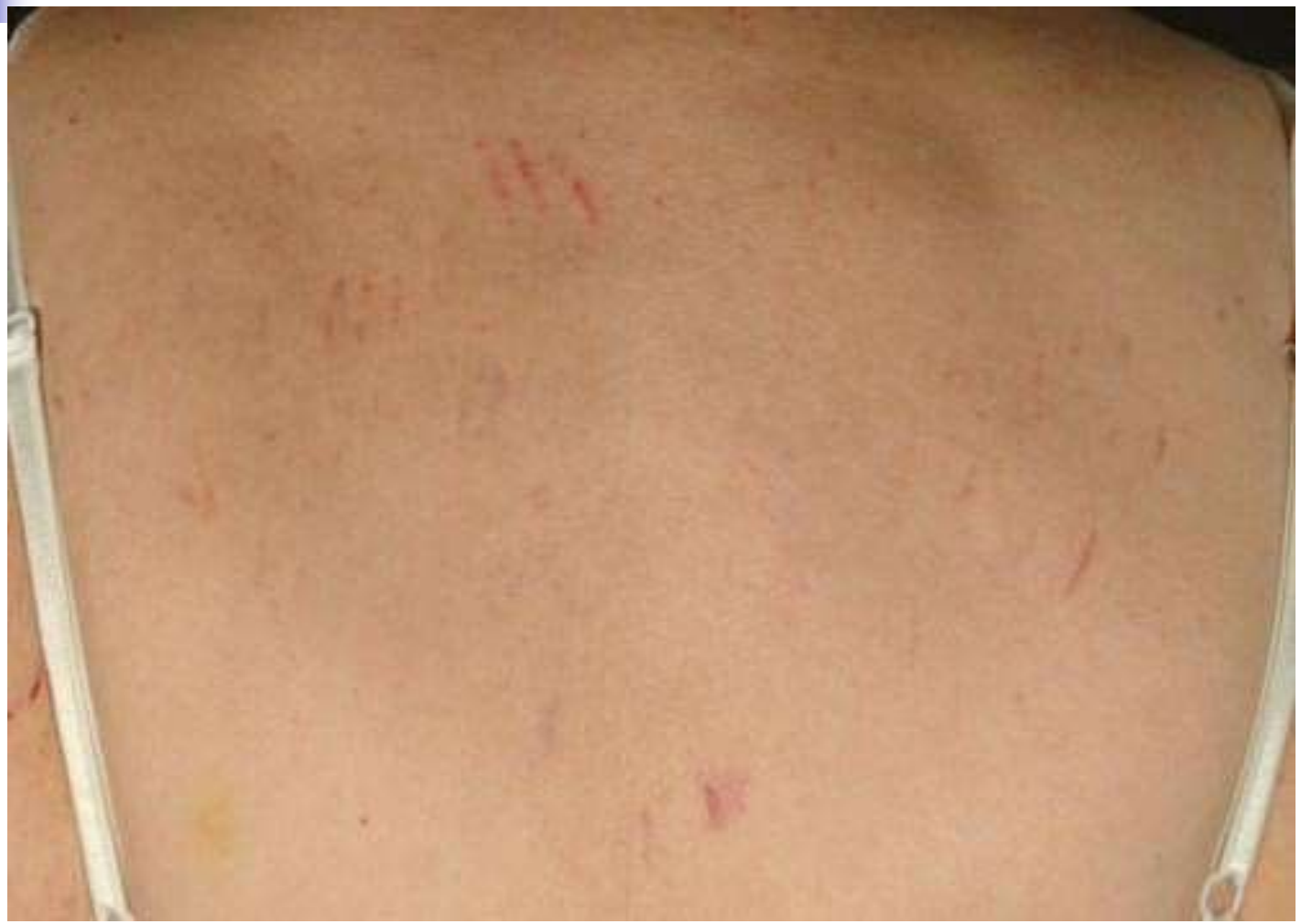
Pruritus

- Causes-skin disease or not
- Outline principles of treatment
- Awareness of need to refer
- Examine to elicit cause pruritus, describe any rash, formulate differential, order and interpret investigations, recognise need for other specialists' input in pruritus

Causes of Pruritus-no rash

- Senescence
- Chronic renal failure
- Cholestasis (NB Pregnancy)
- Iron deficiency (GIT, periods)
- Lymphoma (particularly Hodgkins)
- Polycythaemia (bath itch)
- Thyrotoxicosis or hypothyroid
- Drugs
- Pregnancy alone
- Diabetes?

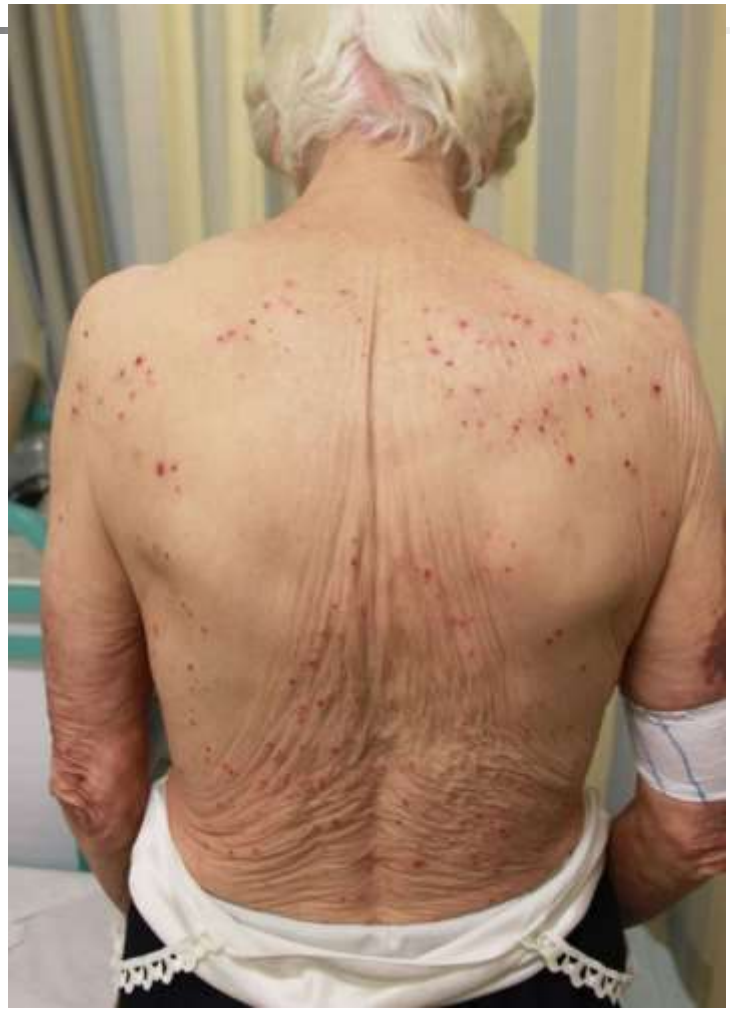
Itching all over 3 mths-What features do you look for on examination to ascertain cause? Investigations?



Pruritus investigations

- FBC
- Ferritin, Fe studies
- U+Es, Creat
- LFTs
- TFTs
- CXR for lymphadenopathy (?CT scan)

Sparing central back/ butterfly sign



Management of pruritus without a rash or obvious cause

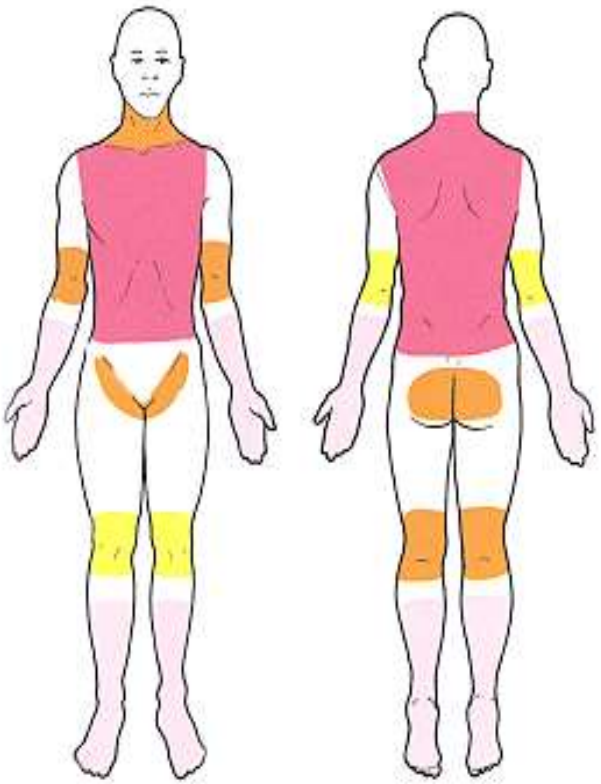
- Symptomatic only
- Topical emollients have anti-pruritic action therefore use plentifully
- Sedative antihistamines best for purposes this talk but recognise worries about dementia so short term use only and non sedating for long-term

Common causes of pruritus with a rash

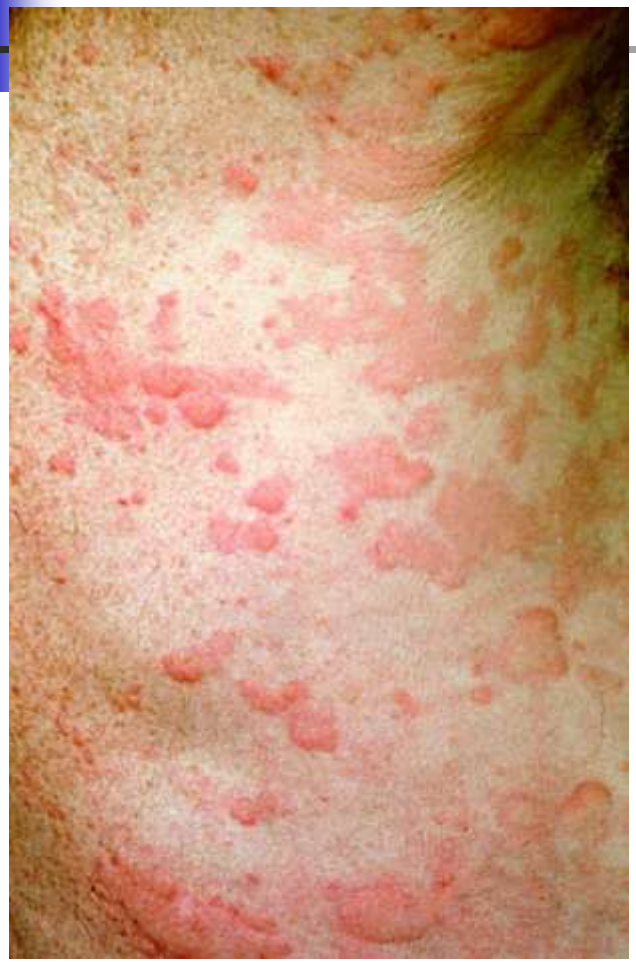
- Urticaria
- Atopic eczema/ discoid eczema
- Psoriasis
- Scabies
- Lichen planus

Distribution of an eruption

- **Truncal** (dark pink) e.g. syphilis, pityriasis rosea, guttate psoriasis
- **Flexural** (orange) e.g. atopic eczema
- **Extensor** (yellow) e.g. psoriasis
- **Acral** (pale pink) e.g. erythema multiforme, lichen planus



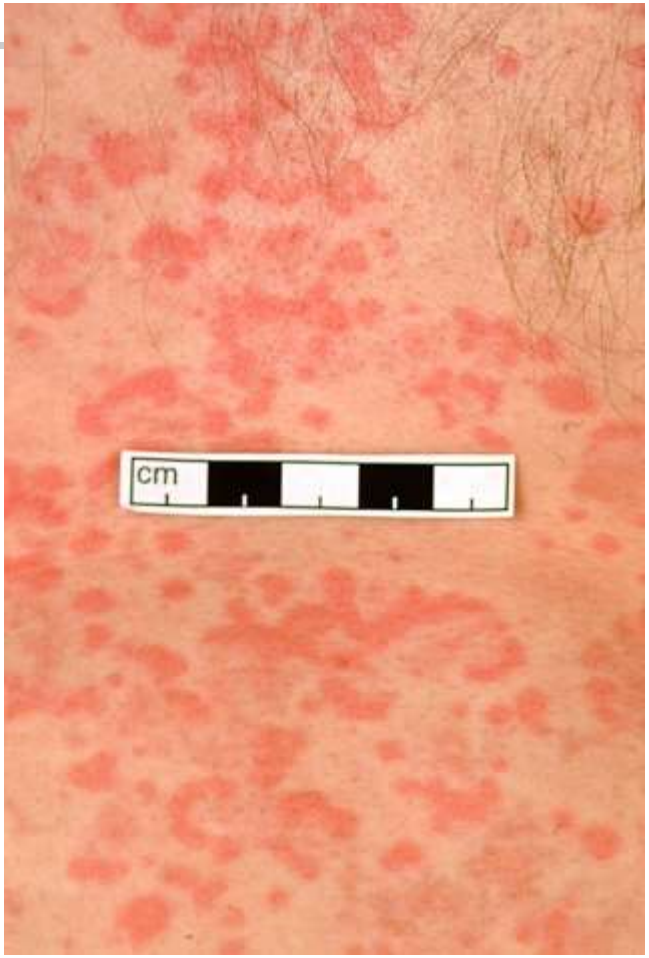
Urticaria



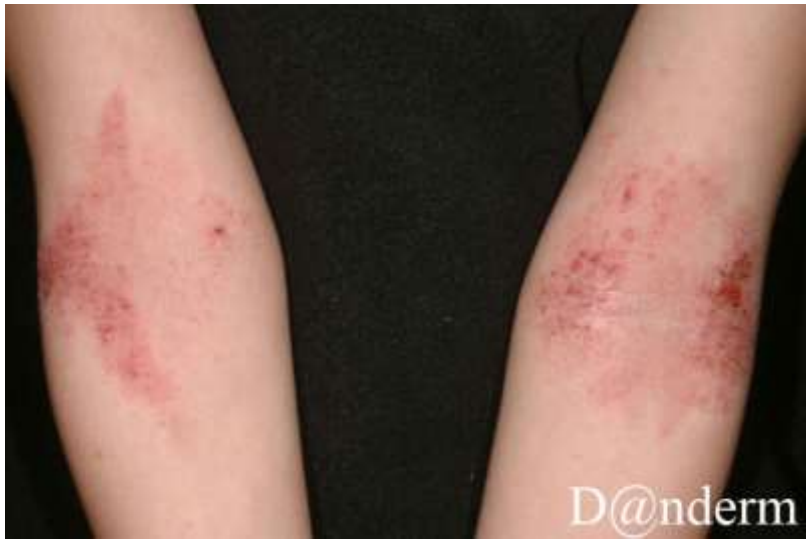
- Key is that the itchy individual lesions come and go within 24 hours
- exception- urticarial vasculitis which is painful rather than itchy, lasts > 24hrs & fades to a bruise

Management acute and chronic urticaria

- Acute (form you are most likely to see) withdraw cause-drugs/food. Use chlorpheniramine (steroids / adrenaline if anaphylaxis)
- Chronic idiopathic-long-term non-sedating anti-histamines

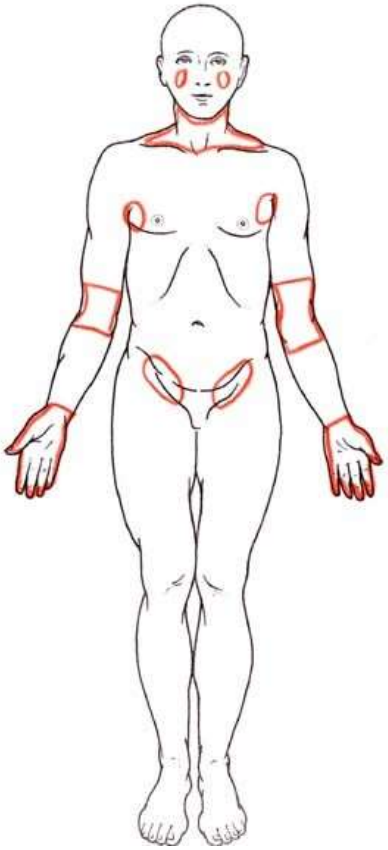


Flexural pattern



Atopic eczema

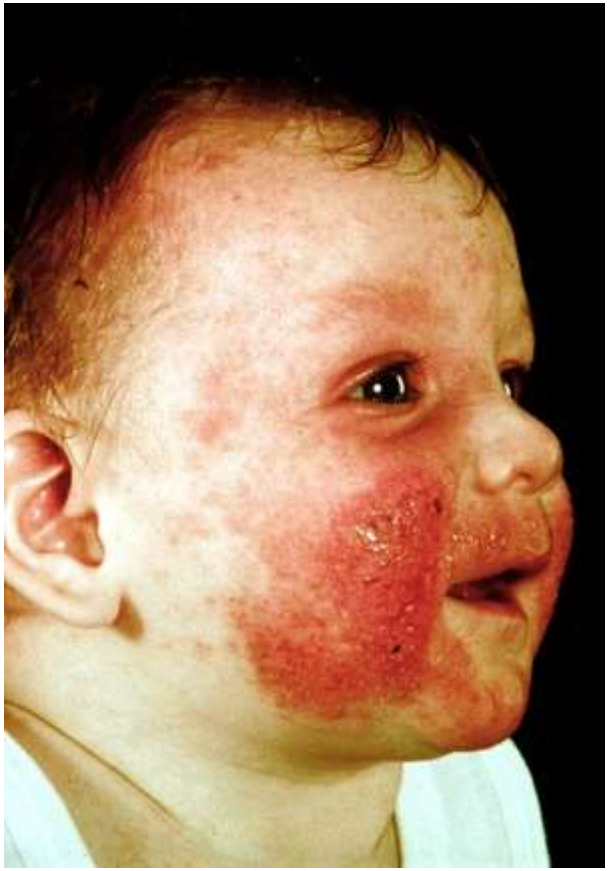
- Defined by it's flexural pattern and a familial tendency to hay fever, urticaria or asthma
- Often starts age 3-6 mths
- Dry skin
- Itchy ++



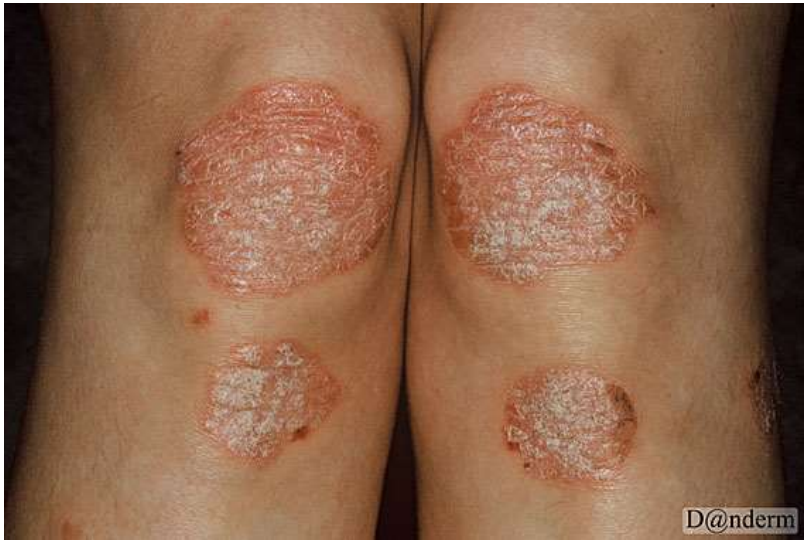
Cause atopic eczema

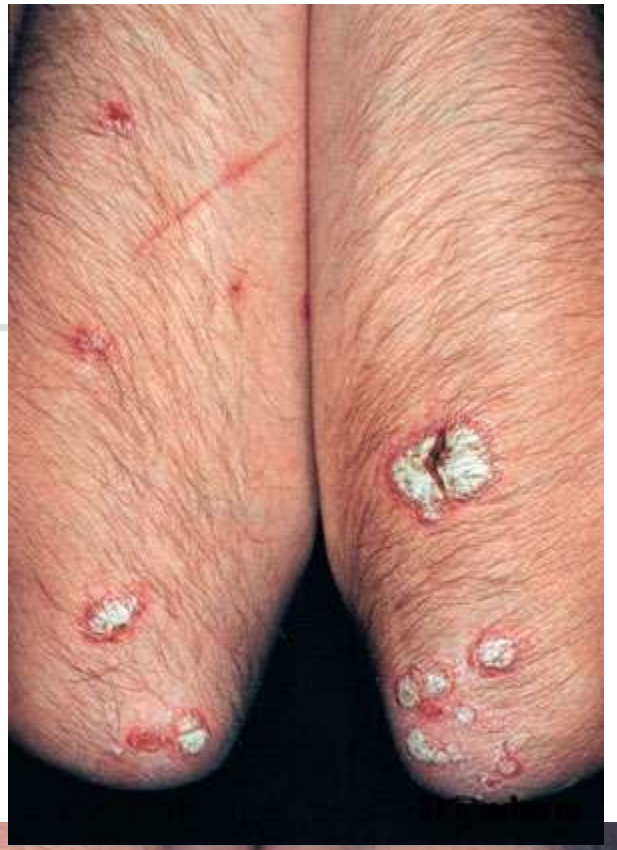
Genetic (70% have FH)– 2 types

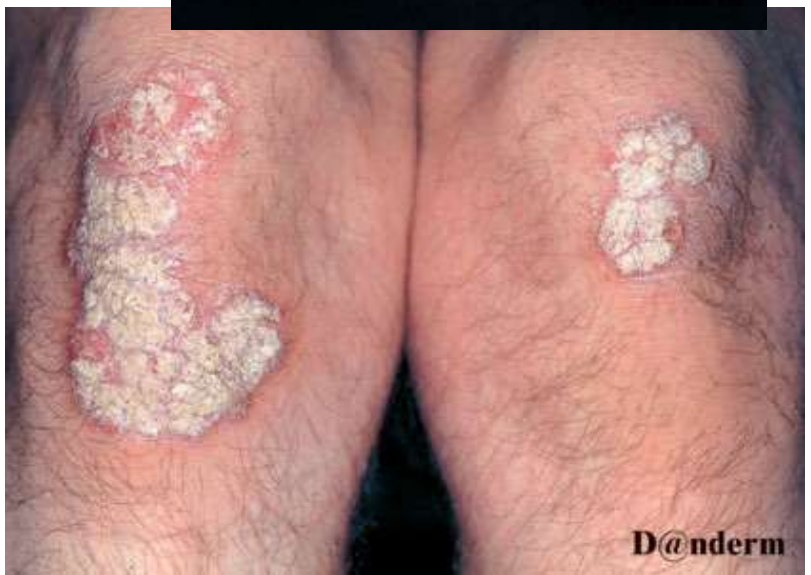
1. Reduced skin barrier function– abnormal fatty acid metabolism.
2. Overactive immune defence mechanisms (raised Ig E, eosinophils, reduced lymphocyte response to infection etc)



Extensor pattern



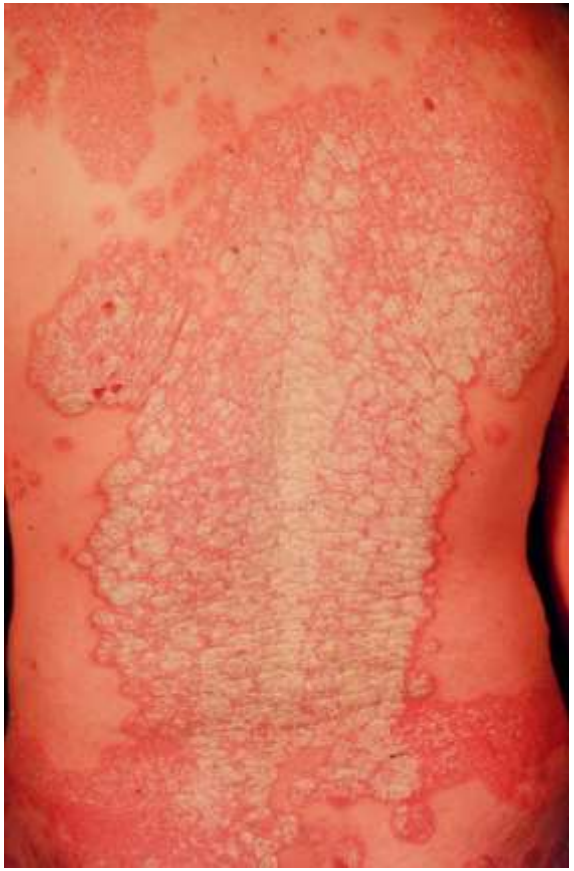




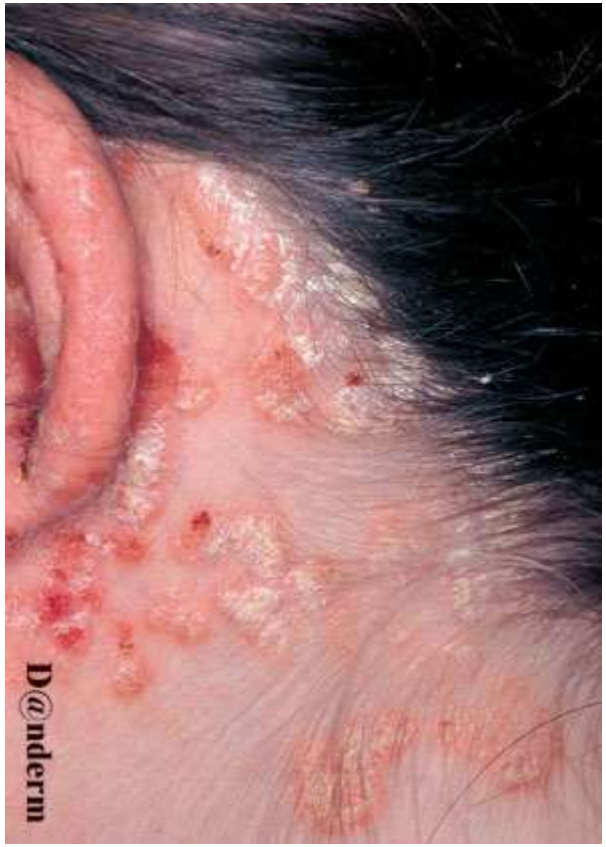
Psoriasis

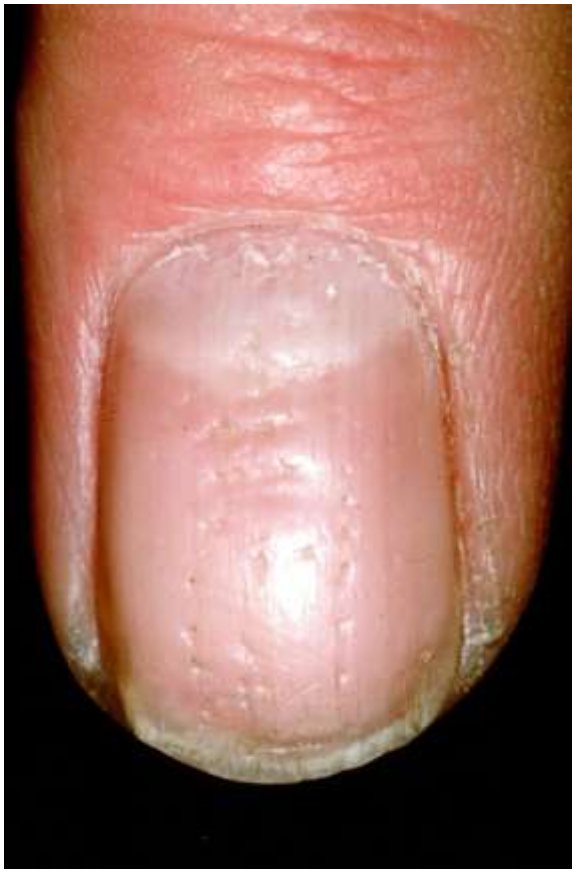
- Can be widespread
- Different forms eg chronic plaque, guttate, scalp, nail, pustular, flexural.
- Exacerbated by strep infections, drugs, friction and stress

- Where should you always think of looking when presented with what you think looks like psoriasis?

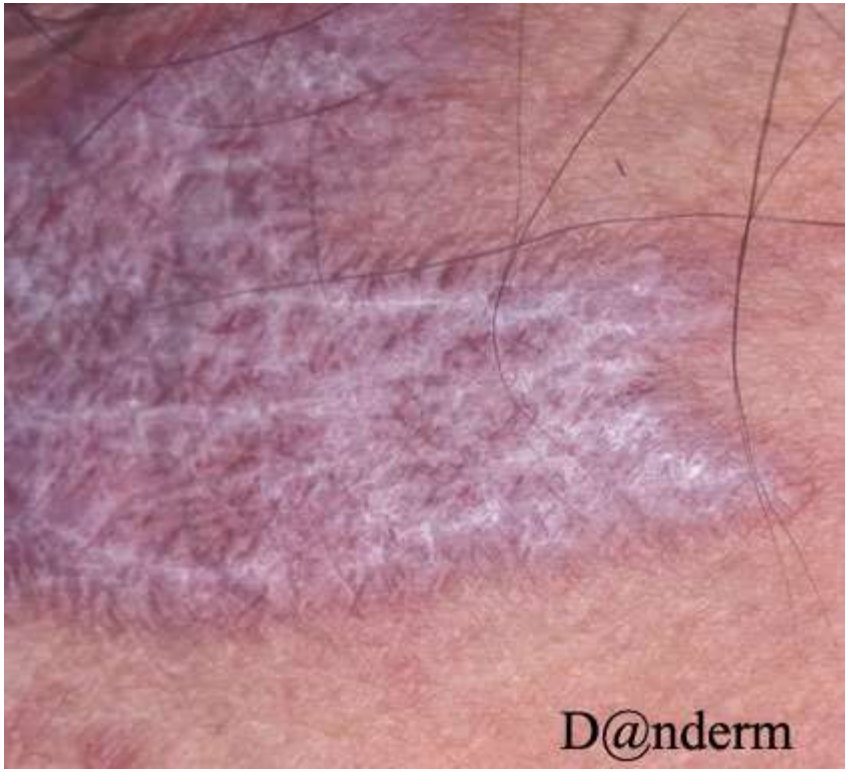


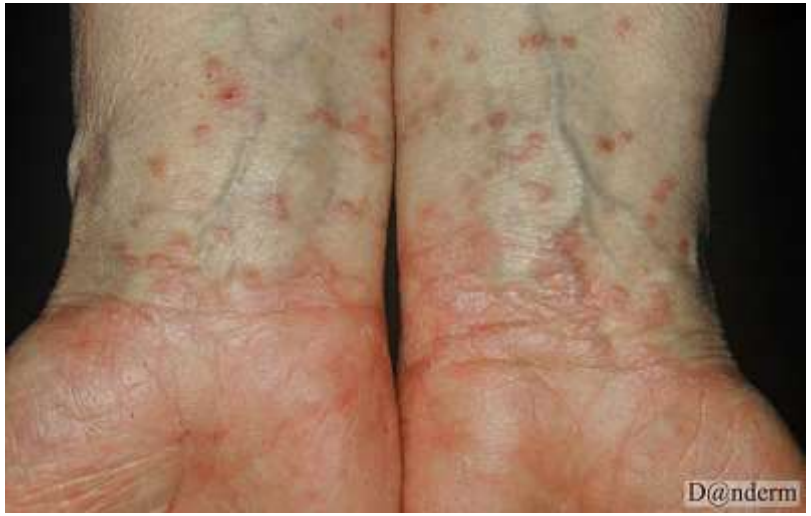
Plus joints



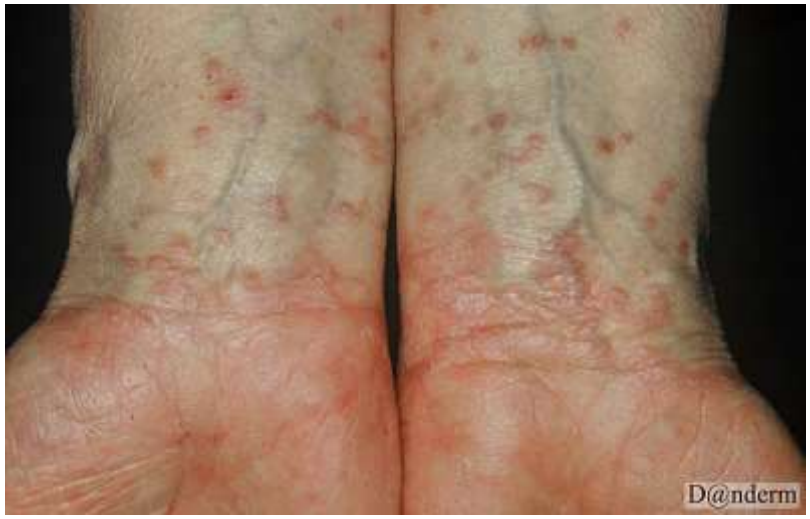


Acral- very itchy. What is this? Why?





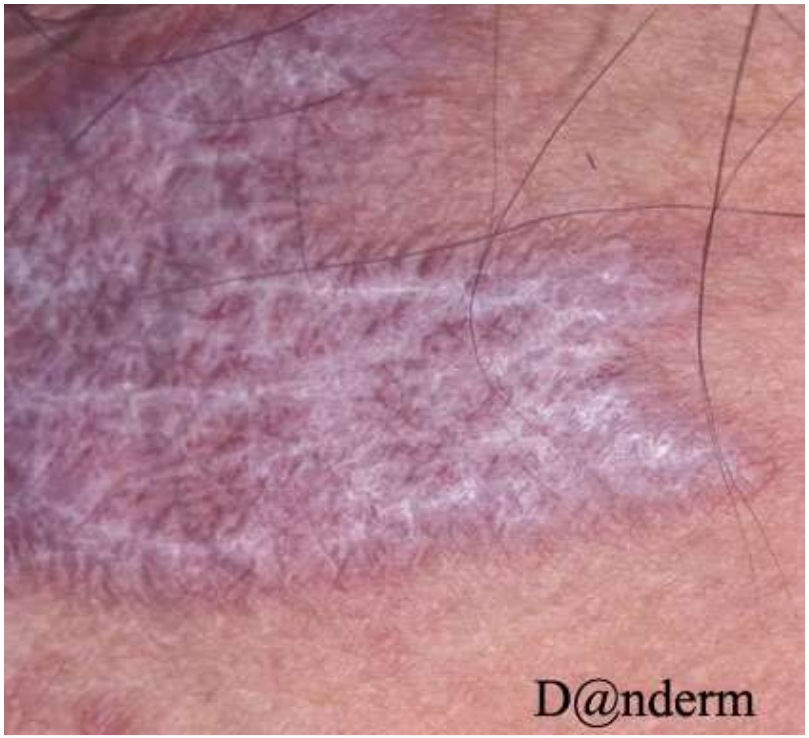
Lichen planus



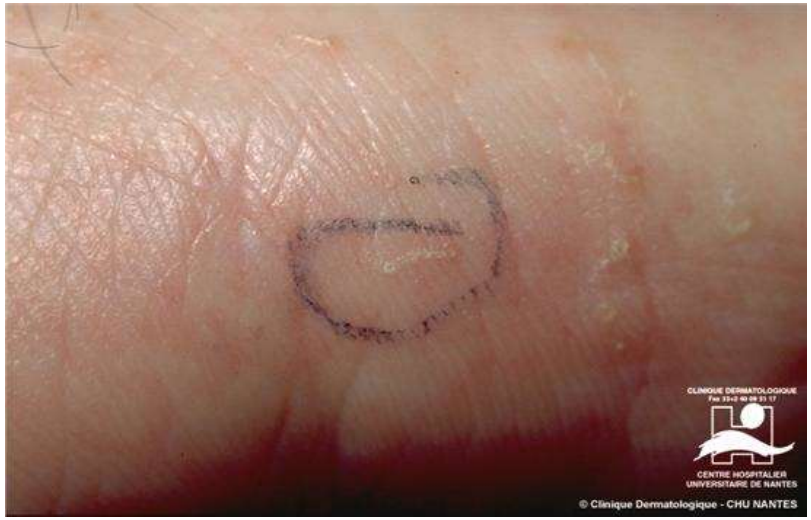
- Abnormal immune reaction with characteristic pattern (?provoked by viral infection)
- Classical LP gives eruption wrists, ankles, lower back and may involve mouth and genitals

LP

- Can also affect hair and nails
- Classically shiny flat-topped papules or plaques with white lines criss-crossing them (in untreated state)
- Classic form burns out by 18/12



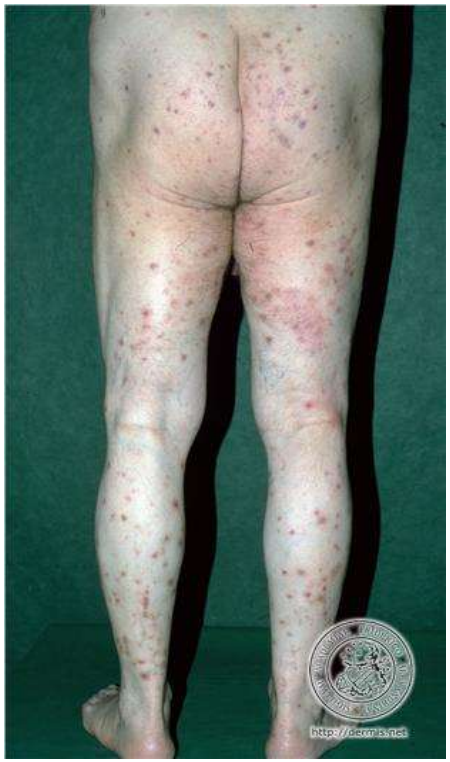
Another acral rash-what is this?



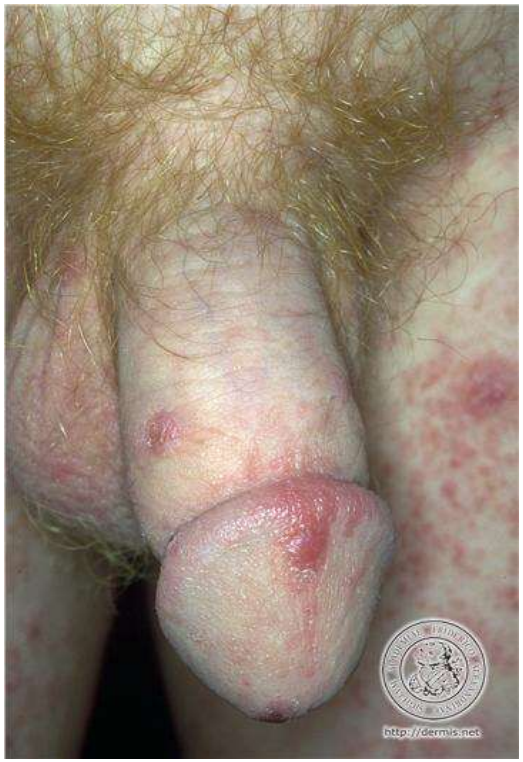
- Itchy rash
- Burrows- finger webs/ wrists/ soles of feet
- 'Scruffy' dermatitis

Scabies

Dermatitis-like rash-red bumps

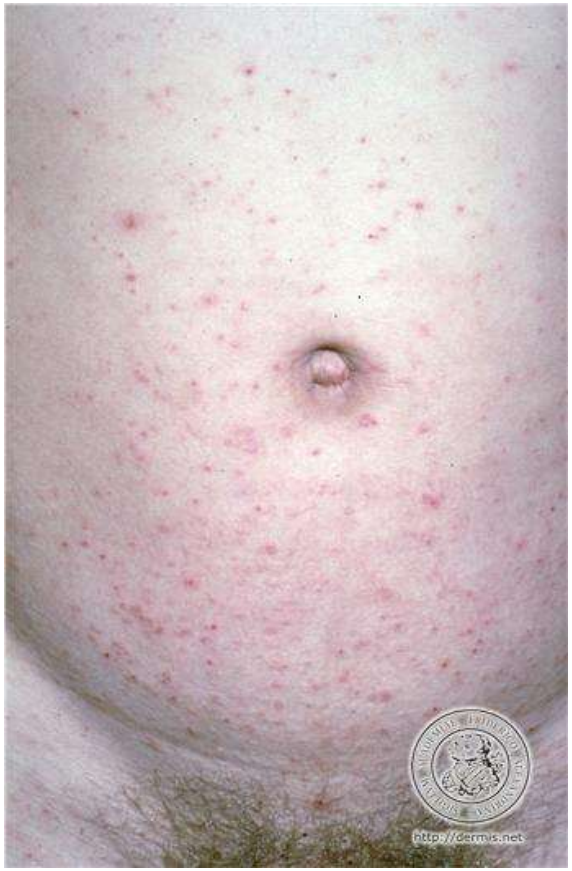


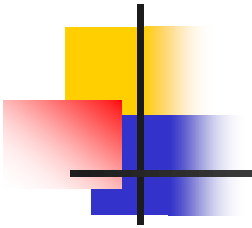
Nodules penis/ nipple/ axillae/ groins



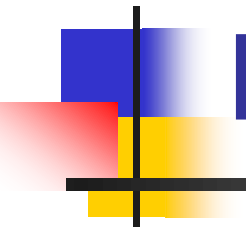
Scabies treatment

- Permethrin or malathion- ensure all finger webs/ creases covered below neck.
- Treat all contacts same time
- Repeat treatment 7 days later as treatment does not work on eggs





- MCQs A and B



Rash

Rash

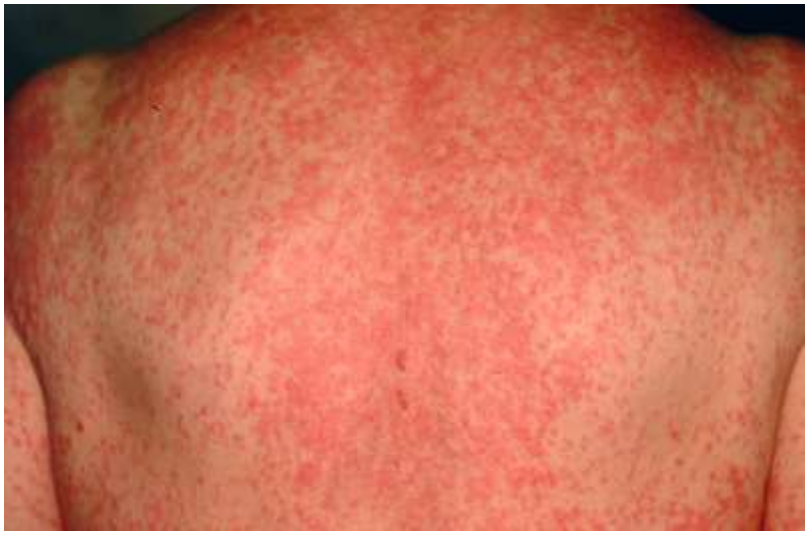
- Describe
- Basic investigations to establish aetiology
- Risk factors, particularly drugs, infections and allergens
- Basic treatment

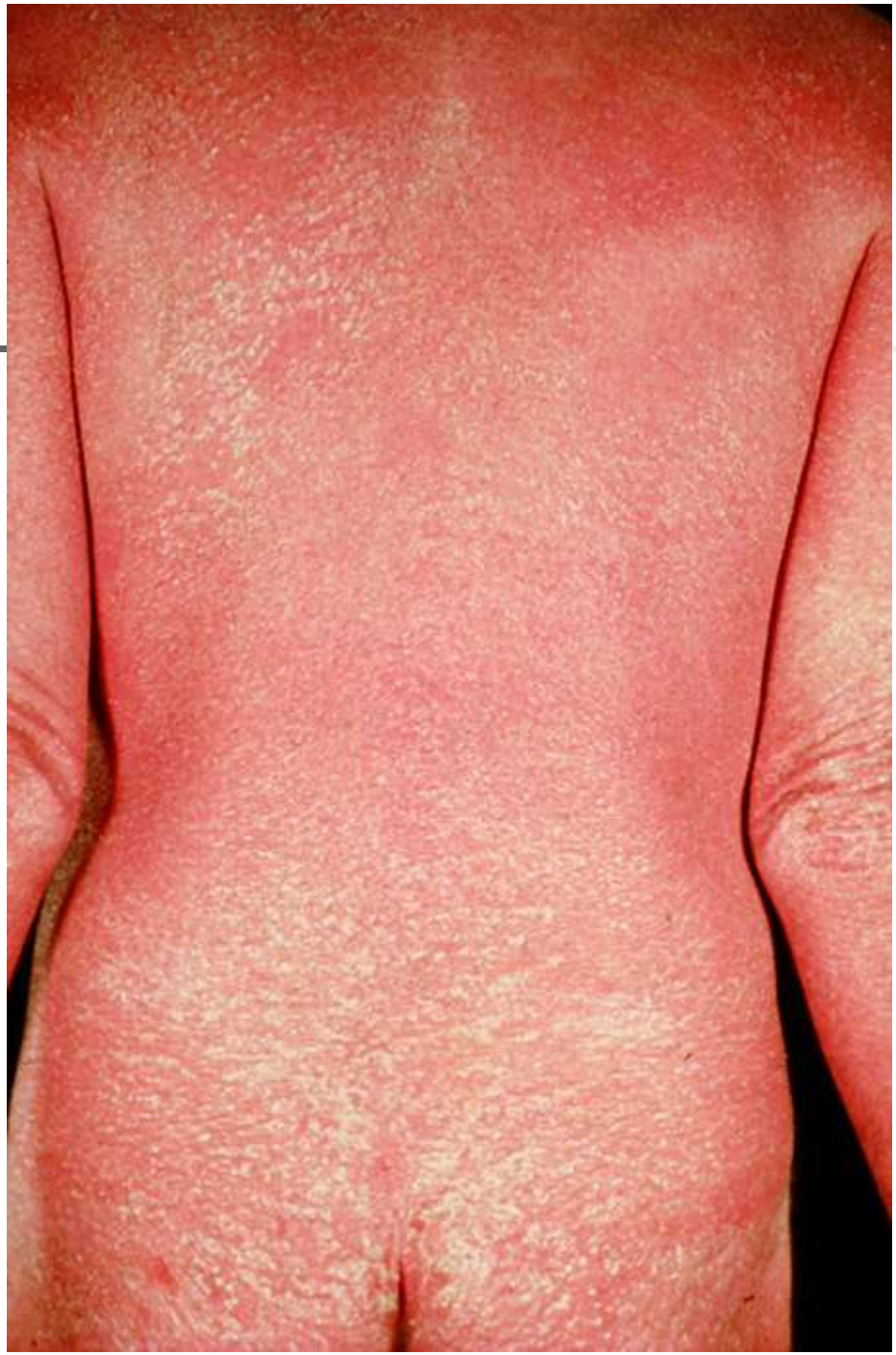
Skills

- Focused history and examination including nails, scalp and mucosae
- Order, interpret and act on investigations appropriate to establish aetiology
- Implement acute medical care when indicated by patient presentation/ initial investigations

Rashes that present acutely

- Erythroderma including pustular psoriasis
- Eczema herpeticum
- (Morbilliform-viral or drug aetiology) (TEN)
- (Scabies)
- Erythema multiforme
- Widespread lichen planus
- Secondary syphilis
- (Blistering disorders)





Erythroderma

Definition:

generalised erythema affecting 90% skin or more. Descriptive term.

Causes?

Erythroderma causes

- Drugs
- Eczema
- Psoriasis
- CTCL
- Others

Erythroderma diagnosis

Focused History :-

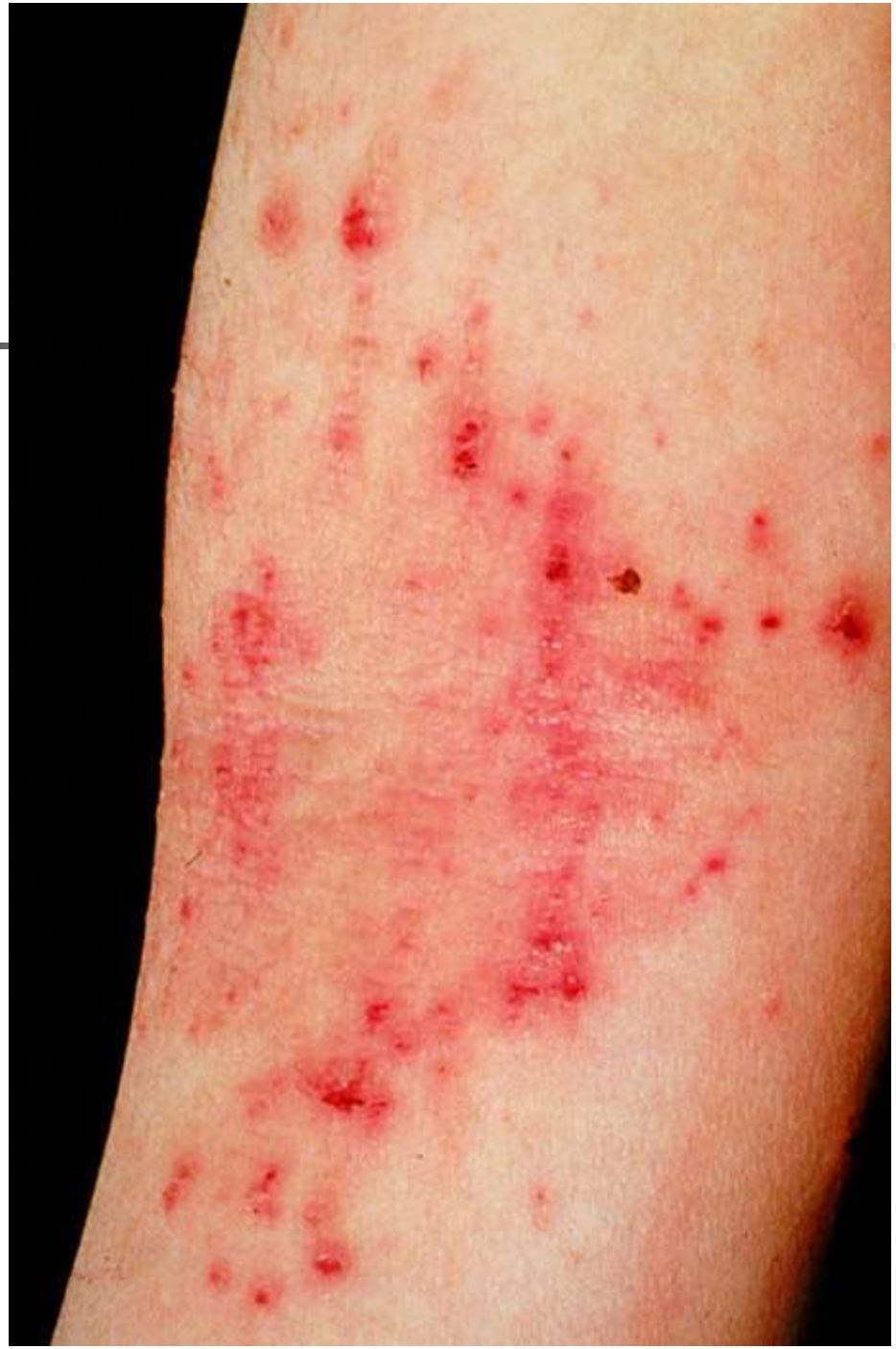
? Personal or family hx of eczema/psoriasis

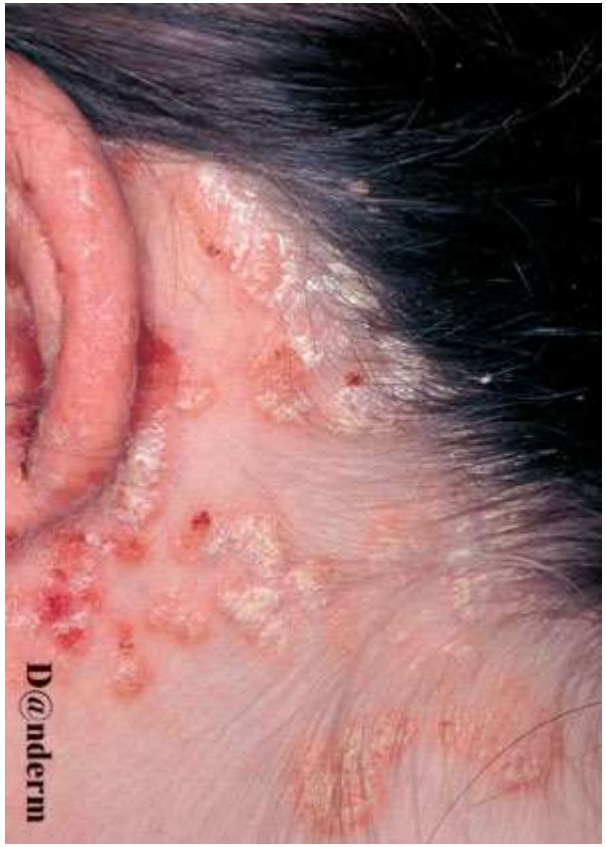
? Hx CTCL

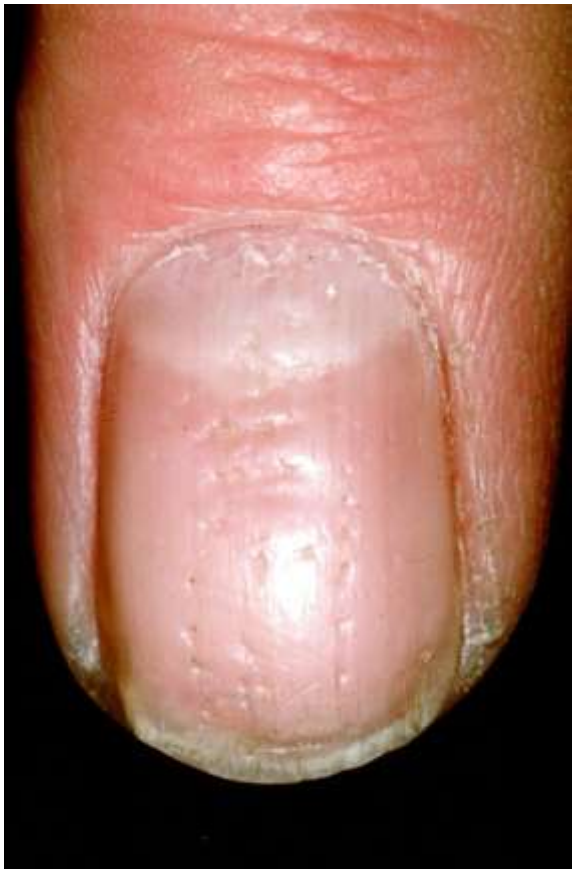
? New drugs

Other clues on examination

Biopsy

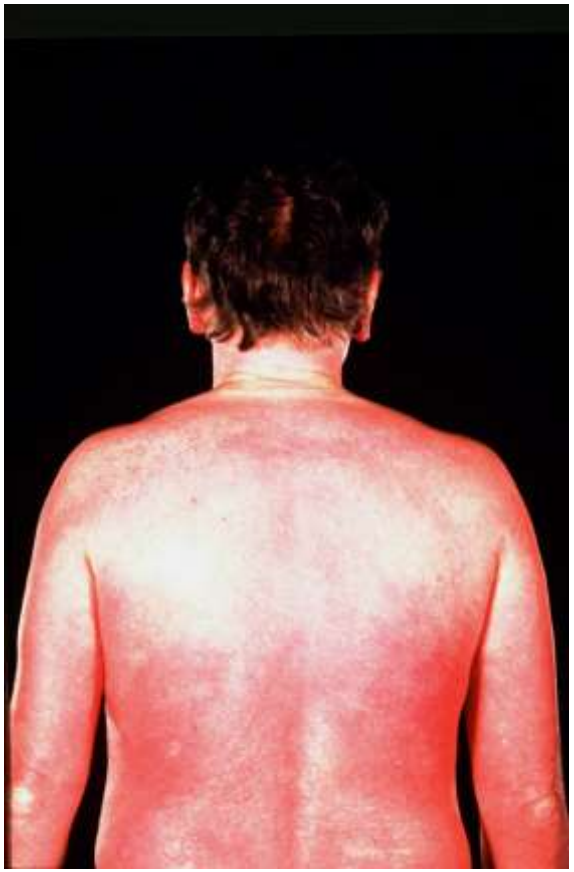



D@nderm



Complications erythroderma

- 'Skin, skin, it's a wonderful thing! It keeps your outsides out and your insides in!'



Complications erythroderma

Prior to steroids, 30% mortality from:-

- Cardiac failure
- Hypothermia
- Dehydration
- Secondary infection

Management erythroderma

- Temp, HR, BP 4 hourly
- Fluid balance
- Examine daily for signs of cardiac failure
- Topical steroids in some cases
- Emollients
- ?Systemic treatment

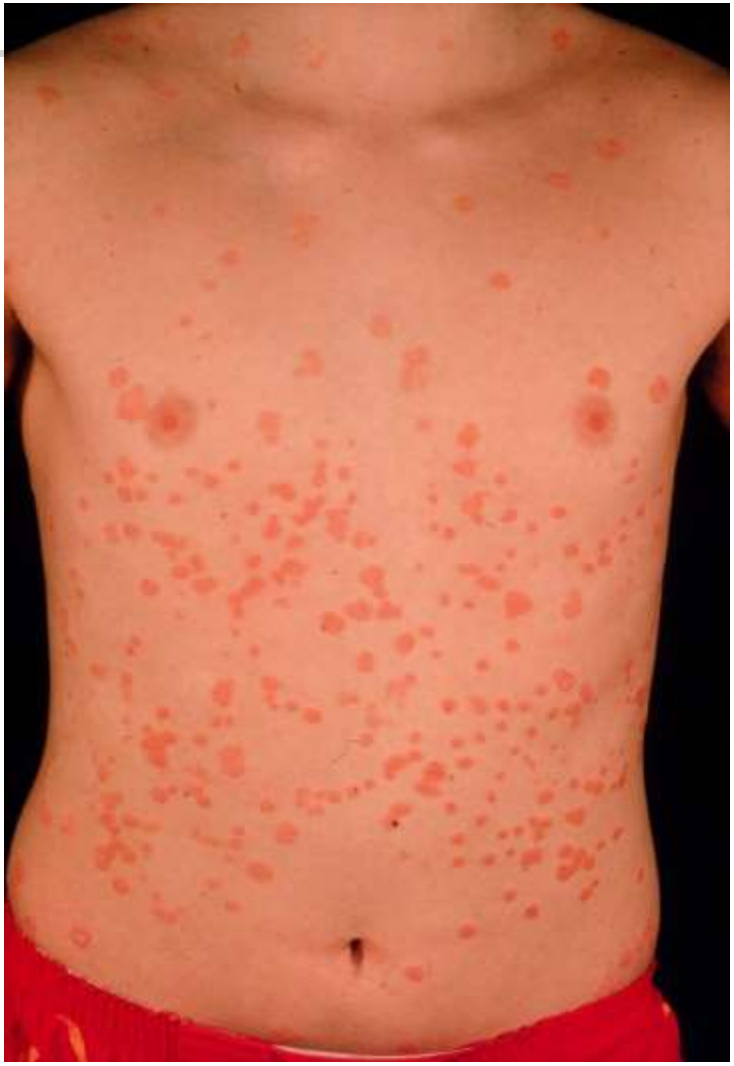
- Eczema herpeticum slide cannot be shown as no permission to publish

GROUP WORK

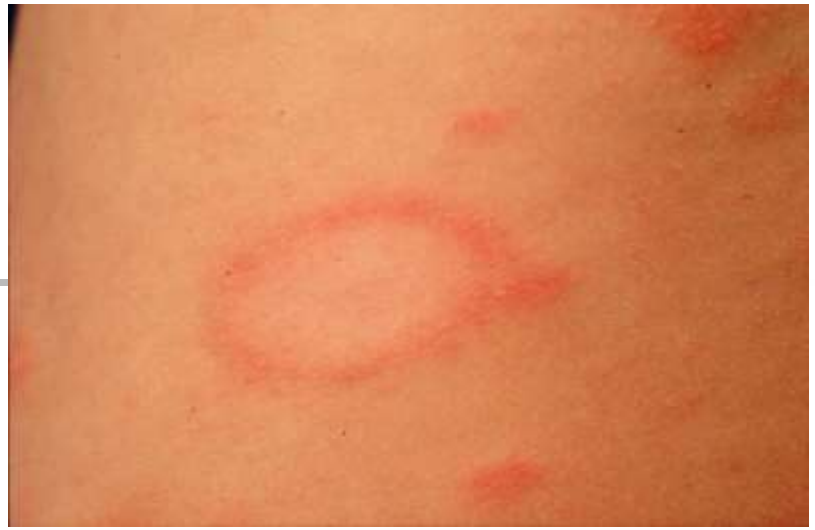
Case 1

Young adult with a recent sore throat develops this eruption.

1. Describe the rash.
2. What is it?
3. What investigation would you do?
4. Do you need to treat it?

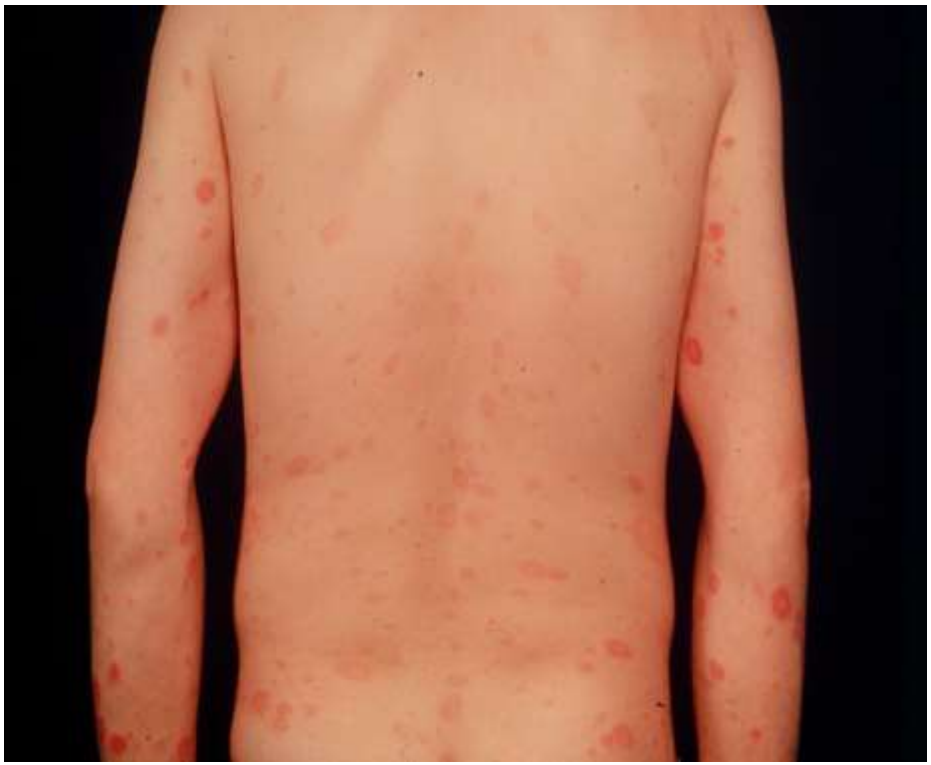


Case 2



Asymptomatic eruption. Started with patch (upper picture)

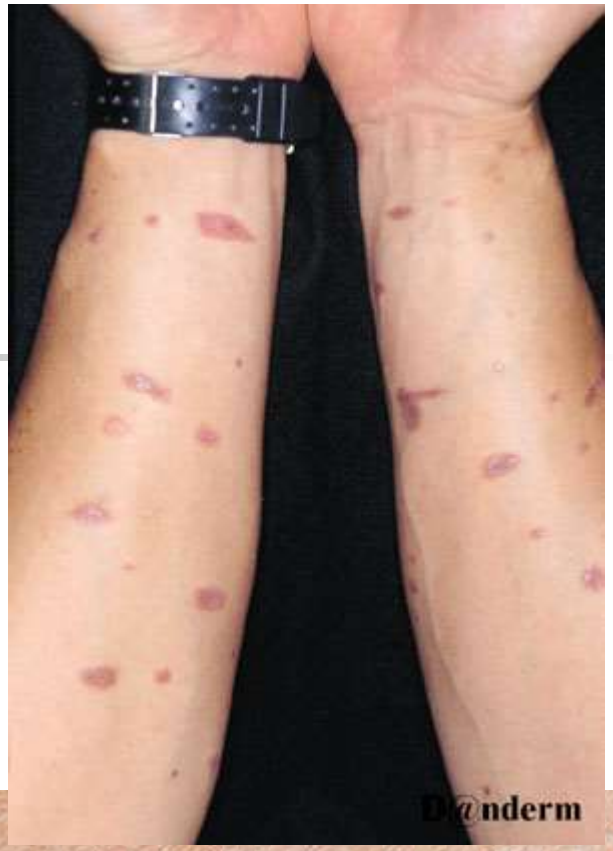
1. What is it?
2. Is it infective?
3. Give two differentials if there had been no preceding patch

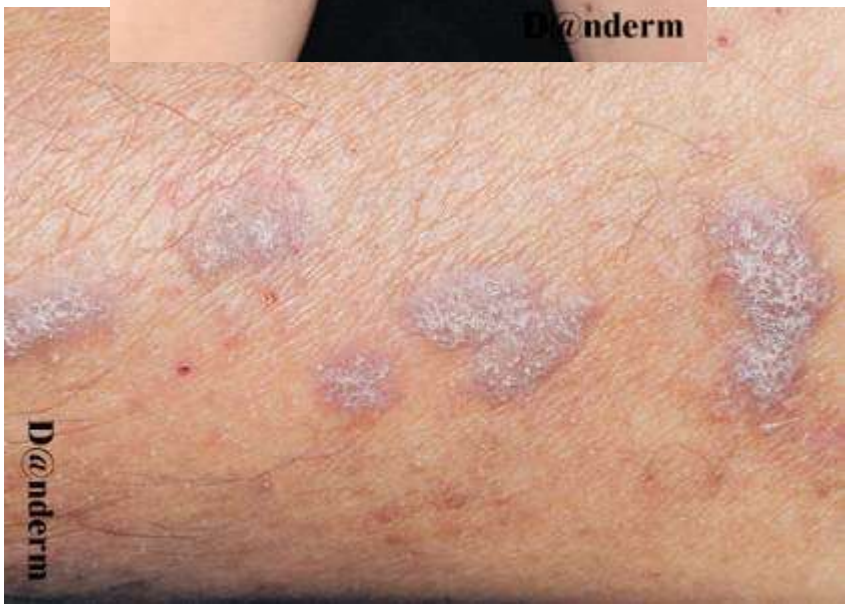


Case 3

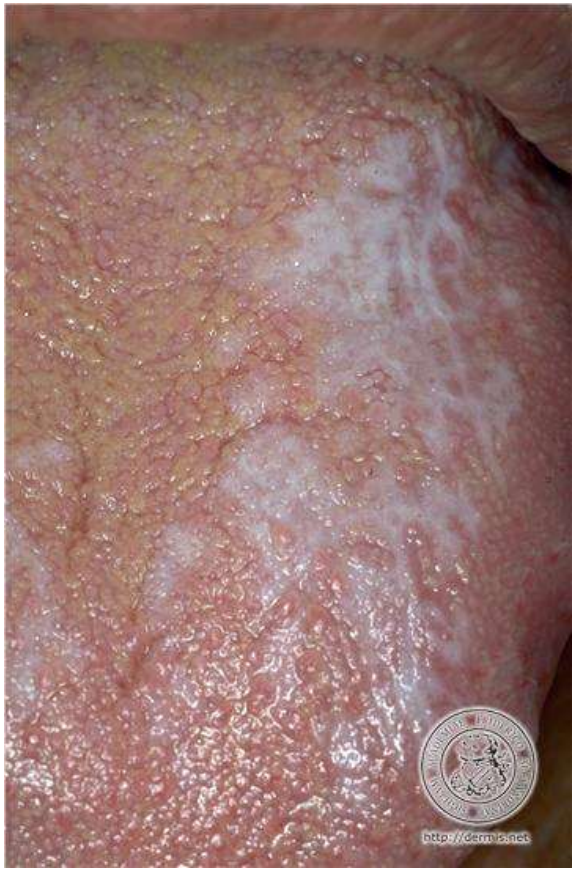
Extremely itchy rash for 3 weeks-

1. Describe it
2. Where else must you look?
4. Does it need investigating?
3. Is it infective?
4. How would you treat it?

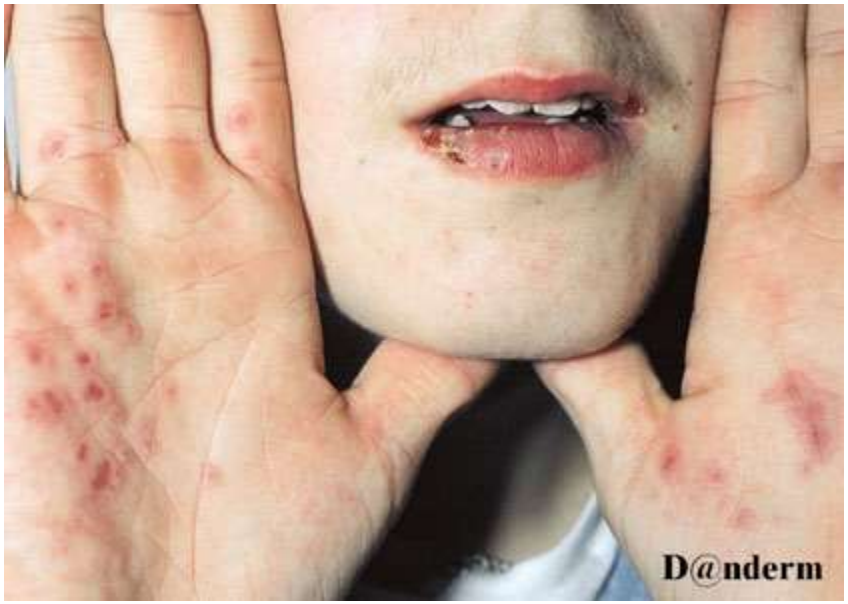




Mouth and nails

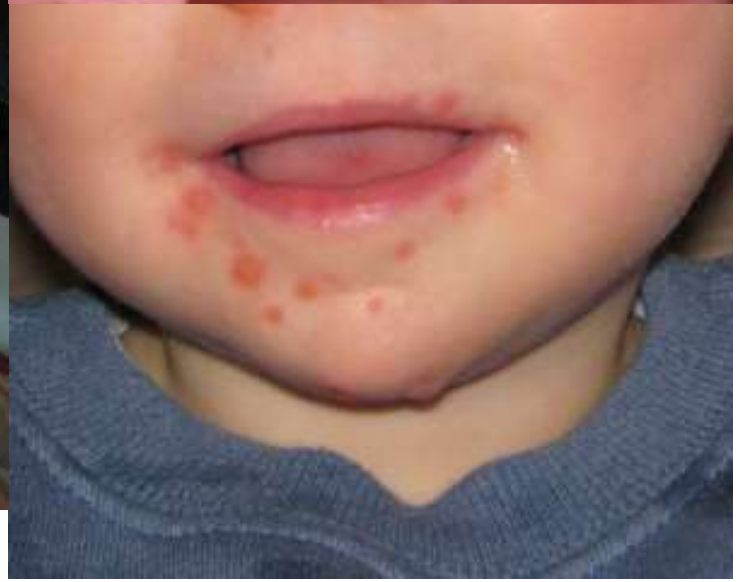


Case 4.



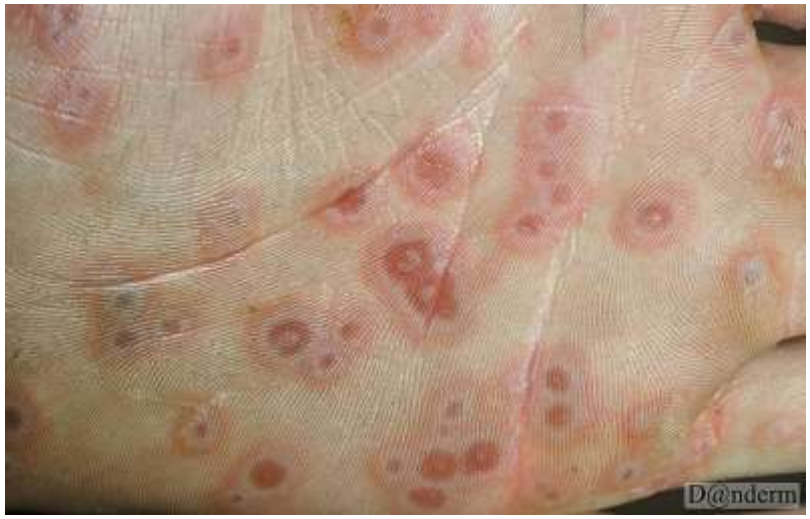
- Patient develops lesions on lips. 10 days later hands and feet are sore.
- What is the rash and what has caused it?
- Give 2 other causes of this condition
- How do you treat it?

Hand, foot and mouth



KlatschmohnAcker

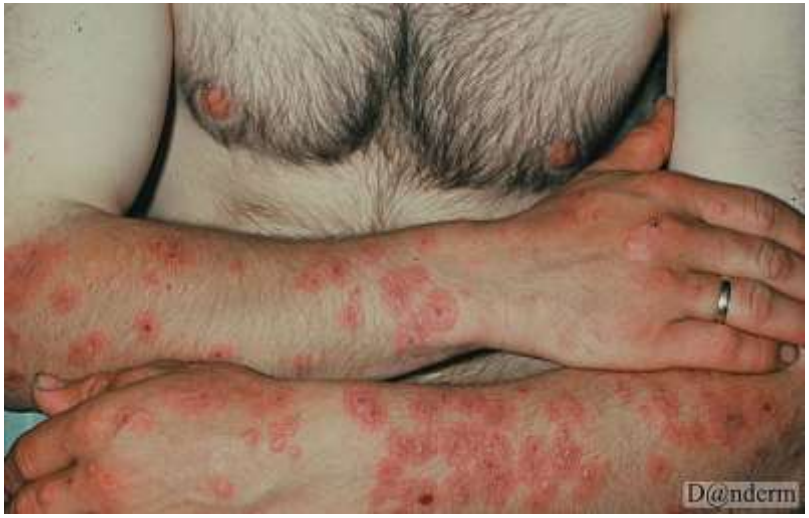
Erythema multiforme causes

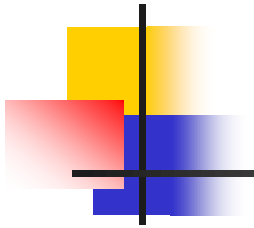


- 50% idiopathic!
- HSV infection elsewhere
- Drugs
- Other infections-HIV, hep B, EBV, orf plus wide range other viruses, mycoplasma, bacteria and fungi
- Sarcoid
- Contact reaction (usually plants or topical medications)
- (SLE/ Wegeners)
- (Carcinoma/lymphoma/leukaemia)

Types erythema multiforme

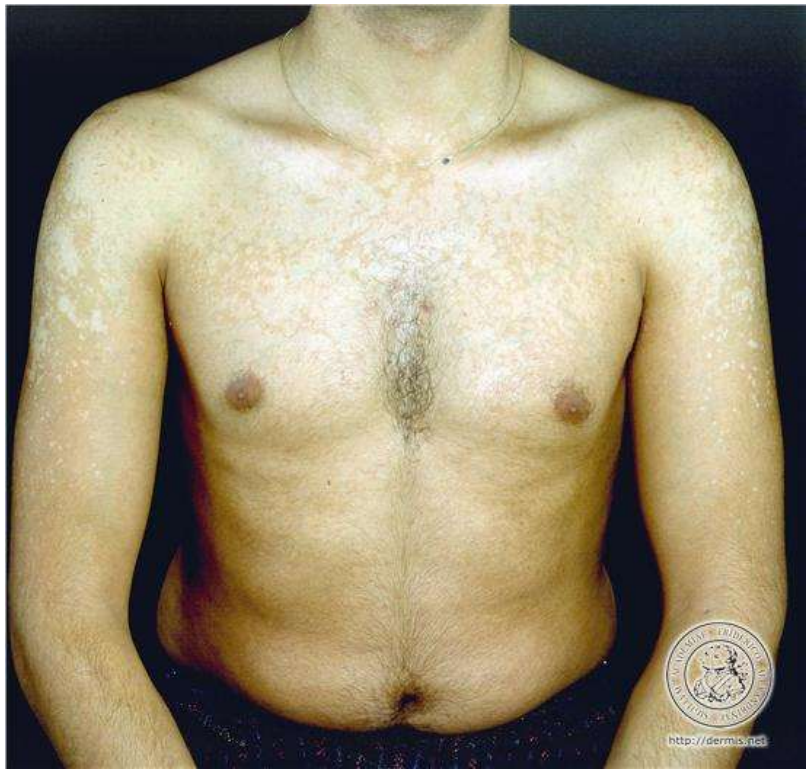
- Minor-acral distribution. Patient not unwell. No/ mild mucous membrane involvement
- Major-sudden onset widespread with severe mucous membrane ulceration

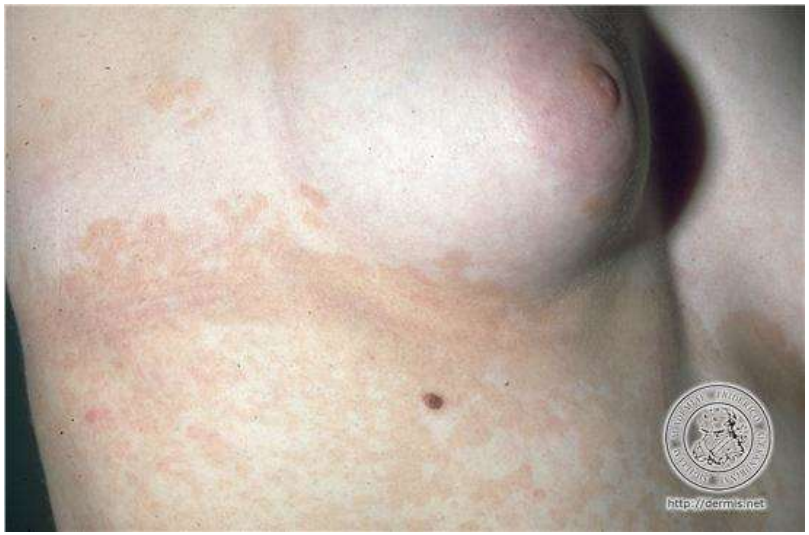




- MCQs C and D

Pityriasis versicolor





Mouth ulcers

Mouth ulcers

- Causes
- Recognise association with immunobullous disorders
- Recognise oral malignancy
- Recognise life-threatening conditions presenting as mouth ulcers, commence treatment and involve seniors
- Order investigations as appropriate

Causes of mouth ulceration

- Infection- HSV (candida)/ syphilis/ HIV
- Autoimmune- pemphigus/ pemphigoid/ SLE/LP
- Drugs-Stevens Johnson syndrome/TEN
- Aphthous- usually idiopathic but (if >3wks)

can be assoc Behcet's, Coeliac, Crohns, B12 def, folic acid def, Fe def & HIV Trauma

- Malignancy-smokers/drinkers

30yr old woman presents unwell with rash-questions?

- Syphilis- no permission to publish

What tests would you do and what treatment is required?

Mouth ulcer question

- Young lady with a month history of ulceration in the mouth. What can you see?
- What do you want to ask her?
- Would you do any investigations?

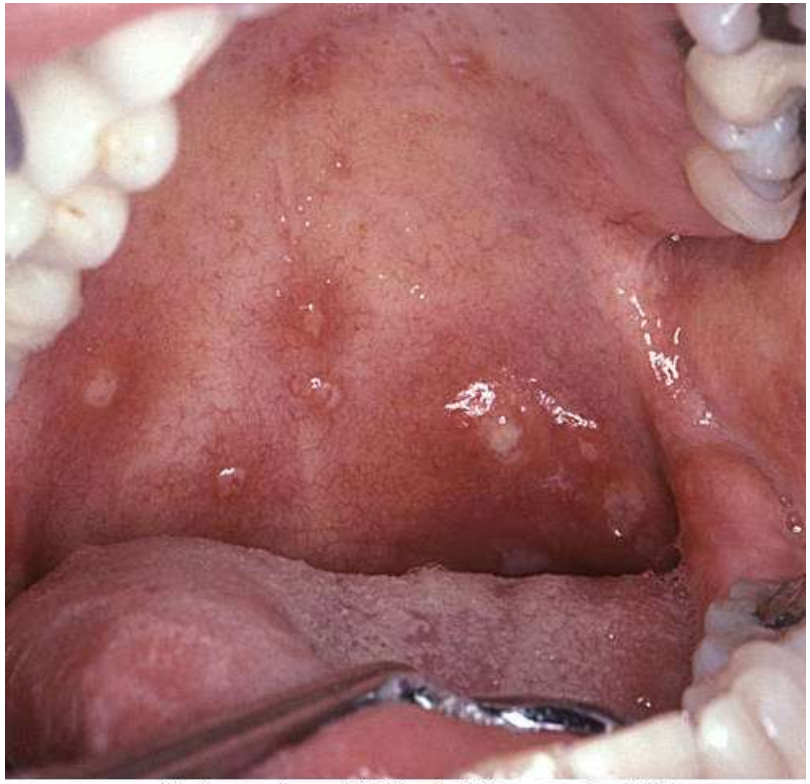
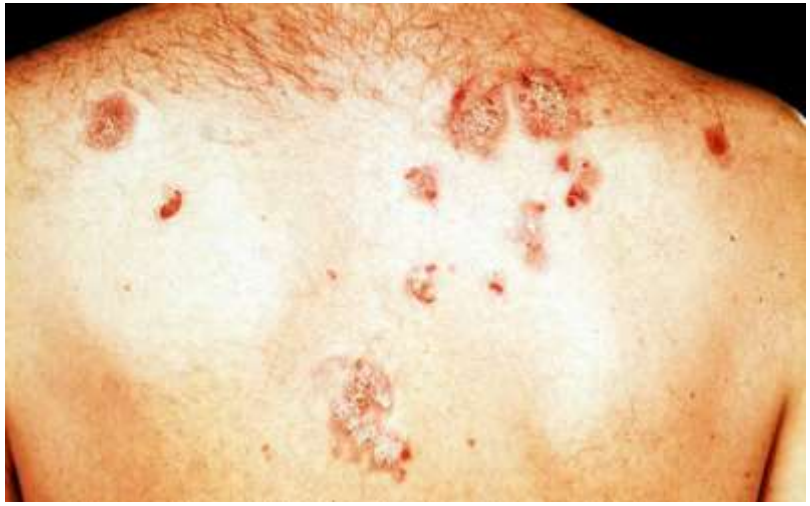


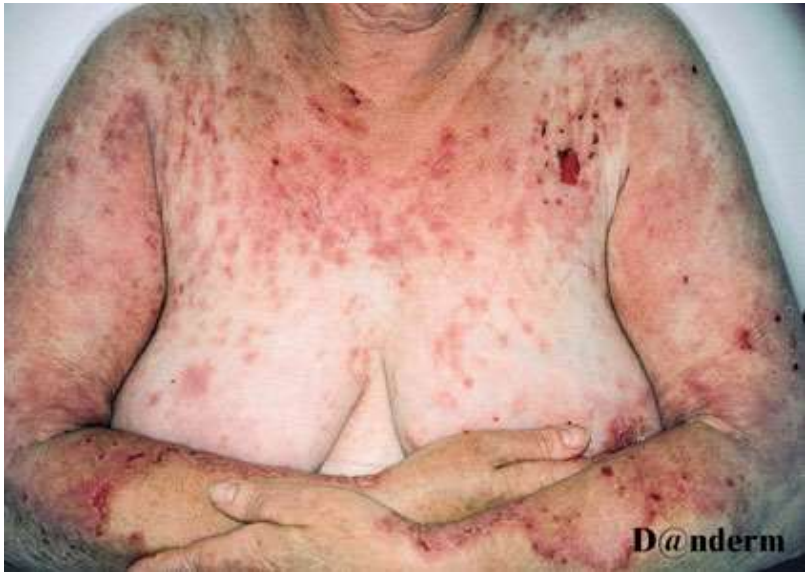
Photo courtesy of CDC - Sol Silverman, Jr., DDS

Elderly man erosions mouth and blistering rash body

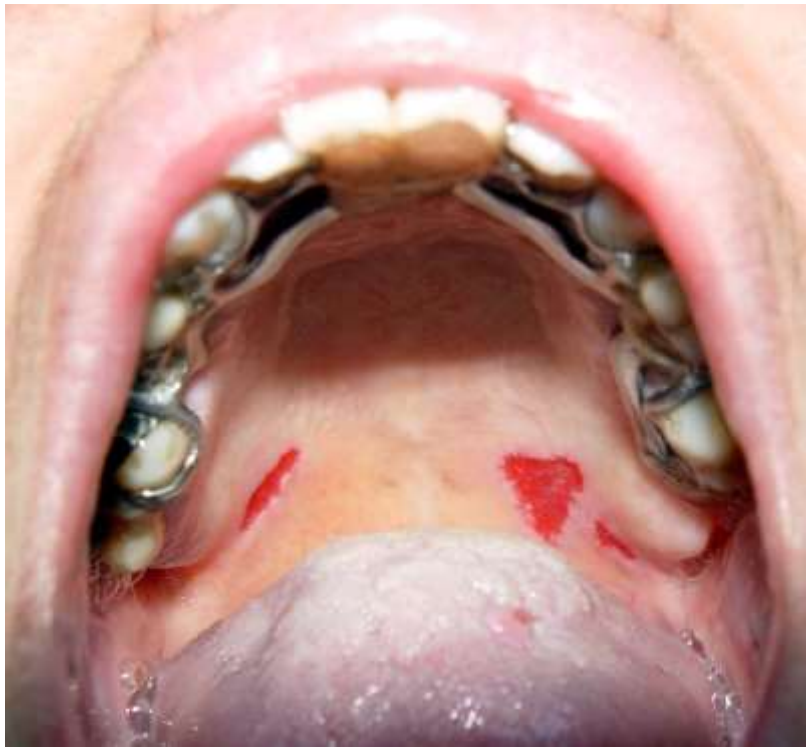
- What is your differential?
- What factors are important to elicit from the history?
- What investigations does he need?

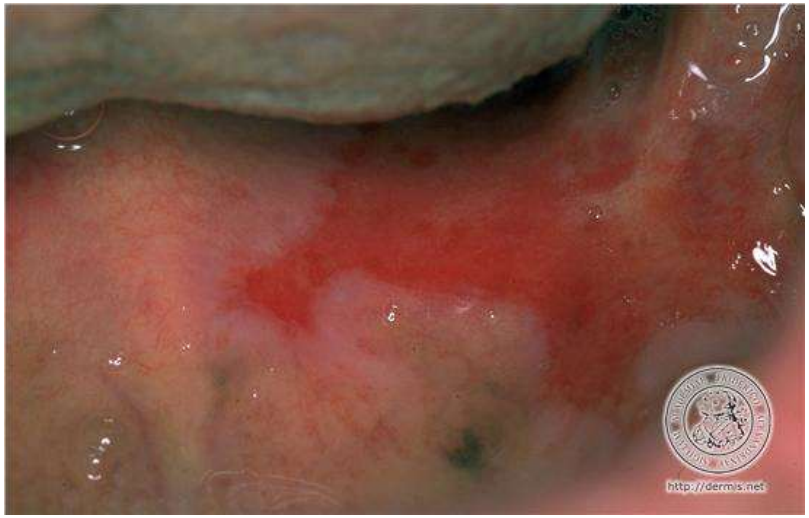
Pemphigus



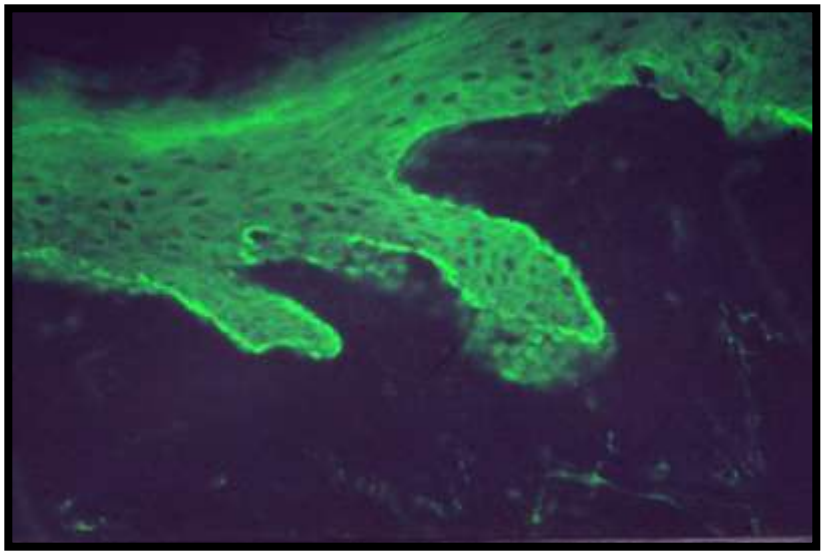


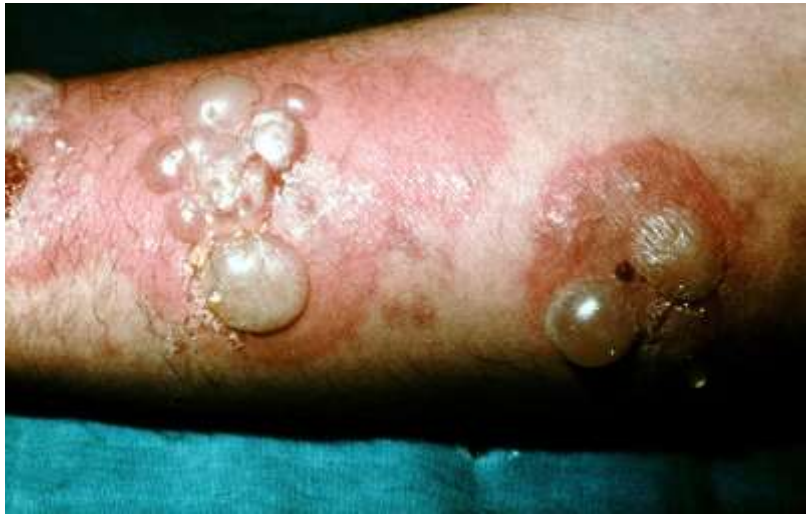
Pemphigus



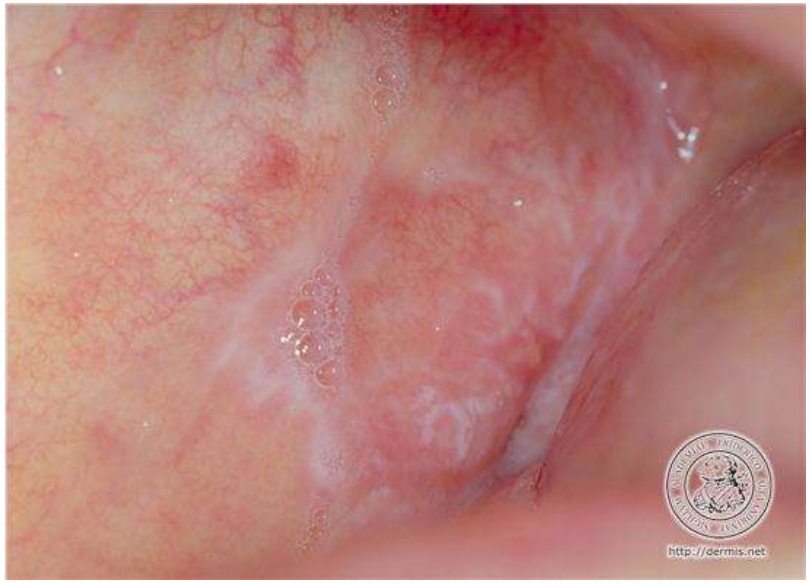


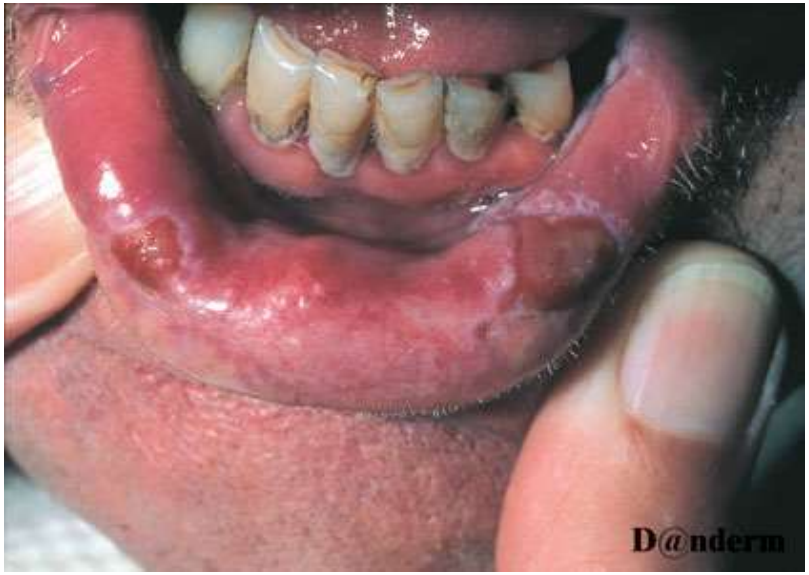
Pemphigoid





Lichen planus can ulcerate and predispose to SCC



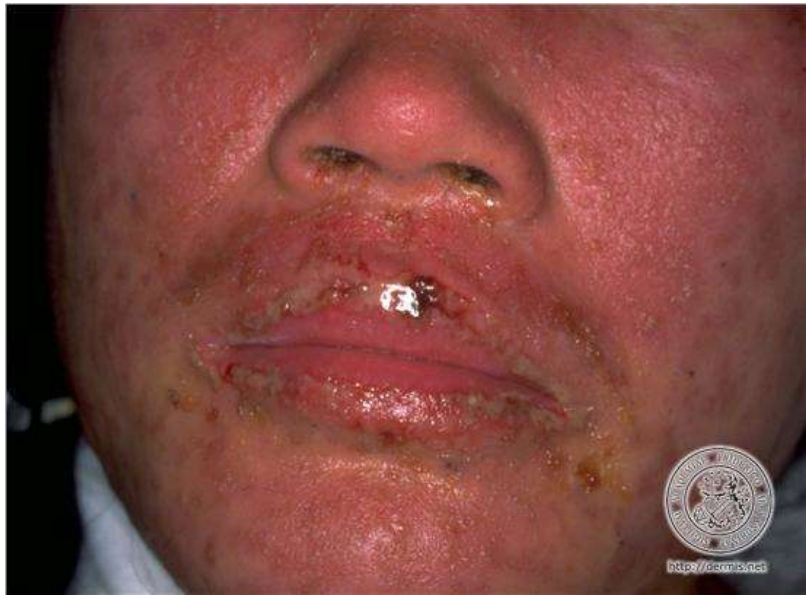


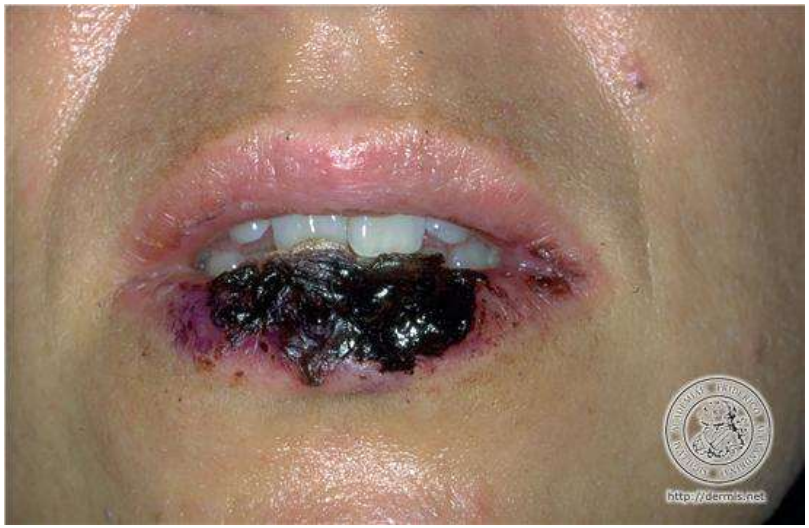
What would make you think of cancer in the mouth?

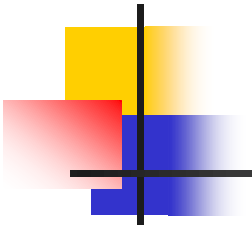
Stevens-Johnson syndrome

- At least 2 mucosal surfaces involved with blistering of skin affecting < 10% BSA. EM like rash.
- Cf Toxic epidermal necrolysis-at least 2 mucosal surfaces involved with blistering skin >10% BSA.

Management?







- MCQs E and F
- Finish!

Summary

- Covered causes, recognition and basic management pruritus, mouth ulcers and rash
- Idea of when to refer and who to refer to