

# ECZEMA AND PSORIASIS

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#### INTRODUCTION

- Incidence and prevalence 20% & 2%
- Days lost of school and work
- Skin disease is distressing and disabling
- Patient expectations
- Eczema & Psoriasis on a spectrum
- Acute, subacute & chronic
- Classify/make the diagnosis/descriptive







#### ATOPIC DERMATITIS





- \* atopic tendency
- \* family history
- \* skin barrier function- filaggrin
- \* complex interaction of genetic and environmental

#### ATOPIC DERMATITIS









- Infants –widespread
- Toddlers- localised, extensors
- Children –flexural, eyelids, neck
- Adults –hands, diffuse pattern

#### IRRITANT CONTACT DERMATITIS





- environmental factors such as cold, overexposure to water, chemicals such as acids, alkalis, detergents, solvents.
- Irritants remove oils
- water, detergents, solvents, acids, alkalis, adhesives, metalworking fluids and friction
- Type –dribble, napkin, friction/skin folds, hand, housewife's

#### ALLERGIC CONTACT DERMATITIS









- Allergen, Type 4 hypersensitivity, CD4 T-cell, cytokines, tiny exposure
- External not internal or air-bourne allergens
- Impaired barrier function, leg ulcers
- Localised+/- generalised (autosensitisation)
- metal workers, hairdressers, beauticians, health care workers, cleaners, painters and florists
- Topical antibiotics
- Nail cosmetics, acrylates
- Nickel, plasters, fragrances, rubber accelerators/gloves, dental implants, black hair Dye/PPD/IPPD Methylisothiazolinone (MI)

# METHYLISOTHIAZOLINONE (MI)

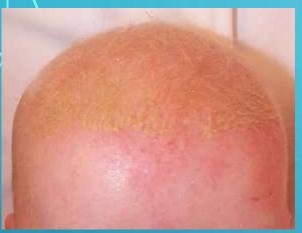
Foundations/concealers	Sunscreens	Detergents/cleaners
Bronzers/self-tanners	Shampoo/conditioners	Fabric softeners/ washing detergents
Eye shadows	Bubble baths	Polishes
Mascaras	Soaps/hand washes/body washes	Pesticides
Make-up removers	Baby wet wipes	Paints
Moisturisers	Creams/lotions/gels	Adhesives/glues
Wet-wipe make-up remover/moist disposable wipes	OTC and prescription medicines Wet-wipe moist personal hygiene cleaners, sunglass cleaners etc	Latex emulsions Coolants Cooling tower water Pulp and paper industry
	ECG electrode gels	Curing agents
		Jet fuels
		Printing inks
		Wet-wipes

PATCH TESTING

**OPEN APPLICATION TESTING** 



#### SEBORRHOEIC DERMATITIS







- Sebaceous scalp, face and trunk
- Pityriasis capitis
- Infant and adult types
- Sebopsoriasis
- Immunosuppression: organ transplant recipient, HIV, Lymphoma
- Parkinson disease, tardive dyskinesia, depression, epilepsy
- Proliferation of skin commensal
- Metabolites (fatty acids) ->inflammation
- Malassezia

# ECZEMA CRAQUELE/ASTEATOTIC



Distinctive crazy-paving
 appearance, diamond-shaped
 plates of skin separated from each
 other by red bands forming a
 network



Ichthyosis

# NUMMULAR/DISCOID ECZEMA





- scattered, roundish patches, intensely itchy, limbs
- well circumscribed, mostly 1–3 cm in diameter
- Post inflammatory hyperpigmentation
- Differential –tinea corporis
- alcoholism

# INFECTIVE/IMPETIGO/MYCOSES ASSOCIATED







- Impetigo is a common acute superficial bacterial skin infection (pyoderma).
- Strep, staph
- Bullous (staphylococcal exfoliative toxins targets desmoglein 1 (a desmosomal adhesion glycoprotein)
- pustules and honey-coloured crusted erosions
- ecthyma

# GRAVITATIONAL/VARICOSE/VENOUS INSUFFICIENCY



- venous insufficiency, elderly
- fluid collecting in the tissues and activation of the innate immune response
- discrete patches or become confluent
- Itchy red, blistered and crusted plaques; or dry fissured and scaly
- Orange-brown macular pigmentation due to haemosiderin deposition
- Atrophie Blanche
- Lipodermatosclerosis

# OTITIS EXTERNA







# LICHEN SIMPLEX CHRONICUS







#### MEYESON'S ECZEMA

- Melanocytic nevus surrounded by dermatitis
- In patients with or without eczema
- Usually benign
- Melanoma very rare
- Halo nevus is different



#### PHOTOALLERGY & CHRONIC ACTINIC DERMATITIS



# **PSORIASIS**











#### CHRONIC PLAQUE PSORIASIS







- Red, sharply demarcated, scaly plaques
- Chronic, long-standing
- Truck, extensors, abdomen
- Difficult to treat

# GUTTATE PSORIASIS









### FLEXURAL PSORIASIS







- Armpits
- Groin
- Sub-mammary
- Umbilicus
- Penis
- Vulva
- Natal cleft
- Peri-anal

# NAIL PSORIASIS





• Psoriasis can enhance speed of nail growth and thickness of the nail plate. • Pitting - partial loss of cells from the surface of nail plate (proximal nail matrix) Leukonychia (areas of white nail plate) - parakeratosis nail plate (mid-matrix) • Onycholysis - separation of the nail plate from the underlying nail bed and hyponychium • Oil drop/salmon patch - translucent yellow-red discoloration in the nail - inflammation • Subungual hyperkeratosis - scaling under the nail - excessive proliferation of keratinocytes in the nail bed • Transverse lines and ridges - inflammation causing growth arrest followed by hyperproliferation. • Psoriatic inflammation - nail plate crumbling, splinter haemorrhages Acrodermatitis continua of Hallopeau - rare pustular eruption - nail bed, nail matrix and tips of digits



- Rupioid psoriasis: limpet-like cone-shaped hyperkeratotic lesions of psoriasis
- Lichenified psoriasis: chronically rubbed or scratched areas of psoriasis very thickened
- Elephantine psoriasis: very persistent, very thickly scaled, large areas
- Ostraceous psoriasis: very thickly scaled, ring-like areas of psoriasis, resembling an oyster shell
- Linear psoriasis: psoriasis arranged in lines along the body (fetal developmental lines)
- Koebnerised psoriasis: psoriasis developing within an area of skin trauma injury, infection, surgical wound, scratch mark.
- Photosensitive psoriasis

#### ASSESSEMENT OF PSORIASIS

- Age of onset of psoriasis
- Current age and gender
- Sites affected by psoriasis
- Symptoms (itch, soreness)
- Categorisation of psoriasis (localised or generalised, large plaque or small plaque)
- Extent and severity of psoriasis (often by PASI scoring)
- Functional impairment or disability due to the skin disease (often using DLQI or Dermatology Life Quality Index scoring)
- Health problems including blood pressure, weight and body mass index (BMI)
- Smoking status and alcohol intake
- Current medications for psoriasis and other conditions
- Previous treatments and their effect
- Skin <u>phototype</u>
- Suitability of systemic therapy/co-morbidities

#### COMPLICATIONS

PSYCHOLOGICAL/SOCIAL/DAYS LOST WORK

- School missed
- Broken sleep
- Infection
- Eczema herpiticum
- Atropy skin
- Growth

+ Metabolic syndrome –hypertension, obesity, abdominal girth, BMI, dyslipidaemia, diabetes, raised TNP, CRP, fatty liver - Must treat

+ Depression

+ Psoriatic arthritis

#### MONITORING

• EASI

• HADS

• BSA

• DLQI

• DLQI

PASI

• PEST

• HADS

#### TREATMENT ECZEMA

- Triggers
- Clothing –dermsilk, gloves
- Soap substitutes not water alone,
   hydrophilic/lipophilic, preservative, fragrance,
   moisturiser, antiseptic, salicyclic acid, antioxidants
- Soap –alkaline –barrier function

- Emollients decrease scale, increase barrier,
   increase water retention stratum corneum
- Creams, lotions, ointments
- Body site, age, type of eczema
- E45, aqueous, oilatum

#### TOPICAL STEROIDS

- Anti-inflammatory, anti-proliferative, immunosuppressive, vasoconstriction
- Body site –absorption
- Cream vs ointment
- Occlusion
- Mild/moderate/potent/super-potent -600X
- Eumovate, mometasone/betamethasone valerate, clobetasone butyrate
- Combinations –Daktacort, Betnovate C, Fusidin H, Fusibet
- Side effects –atrophy, steroid rosacea, impetigo, telangectasia, hypertrichosis, glaucoma, cataracts
- Finger tip unit —hand -1, body -40, child 1/3

# TACROLIMUS • Immune modulator

Calcinurin inhibitor

• Blocks cytokine release

#### ECZEMA OTHER TREATMENTS

- Antibiotics
- Antihistamines
- Methotrexate
- Azathioprine Thiopurine methyltransferase/TPMT
- Prednisolone
- Ciclosporin
- Mycophenylate mofetil
- Dupilumab IL-4 receptor

#### **PSORIASIS MANAGEMENT**

- Disease pattern
- Disease severity: body surface area (BSA) affected and Psoriasis Area and Severity Index (PASI) score
- Disease impact: symptoms and Dermatology Life Quality Index (DLQI) score
- Patient preference
- Acceptability and practicalities of treatment
- Patient age and general health
- Comorbidities (eg, liver or renal disease; <u>psoriatic arthritis</u>)
- Other medications
- Conception plans or current <u>pregnancy</u>
- Treatment goals (eg, improving nail psoriasis or aiming for a 90% improvement in PASI score [PASI 90])

#### PSORIASIS TREATMENTS

- Weight loss
- Exercise
- •Stress management
- Minimum alcohol
- Smoking cessation
- •Investigation and management health conditions

#### **Emoilliants**

- Keratolytic agents (urea, salicyclic acid)
- •Coal tar
- Topical steroids in combination

Calcipotriol ointment, calcitriol

#### PSORIASIS -SYSTEMIC TREATMENTS

- Methotrexate
- Fumaric acid esters
- Acetretin
- Prednisolone
- Ciclosporin
- Mycophenylate mofetil
- Combinations

#### BIOLOGICS

- Etanercept
- Infliximab
- Adalimumab
- Ustekinumab
- Secukinumab
- Guselkumab

- Anakinra –Still's
- Omalizumab CIU
- Rituximab -dermatomyositis

#### THANK YOU

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