Jockey Club Cadenza e-Tools for Elder Care 賽馬會流金頌護老有e道

策劃及捐助 Initiated and Funded by:
香港賽馬會慈善信託基金 The Hong Kong Jockey Club Charities Trust

計劃伙伴 Project Partner:
香港中文大學 The Chinese University of Hong Kong

香港中文大學 賽馬會老年學研究所 CUHK Jockey Club Institute of Ageing

Demand on you CARE: Common Skin Disorders in Older Adults

Chapter 2
Common Skin Disorders in Older Adults

Common skin problem in older adults

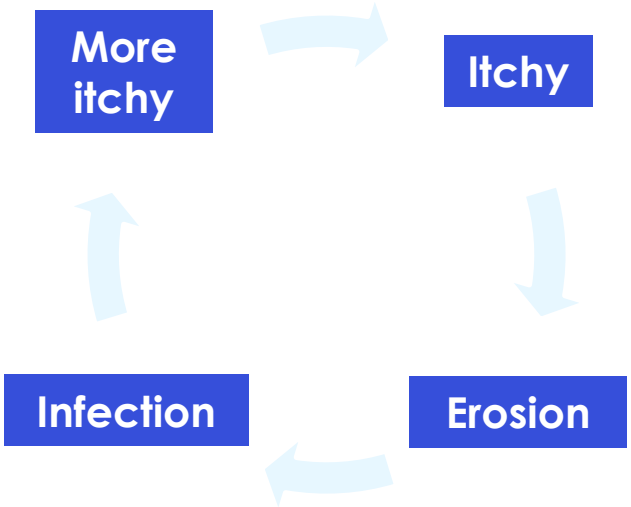
- Asteatotic eczema
- Tinea infection
- Skin cancer
- Herpes zoster
- Bullous pemphigoid
- Scabies

Asteatotic Eczema

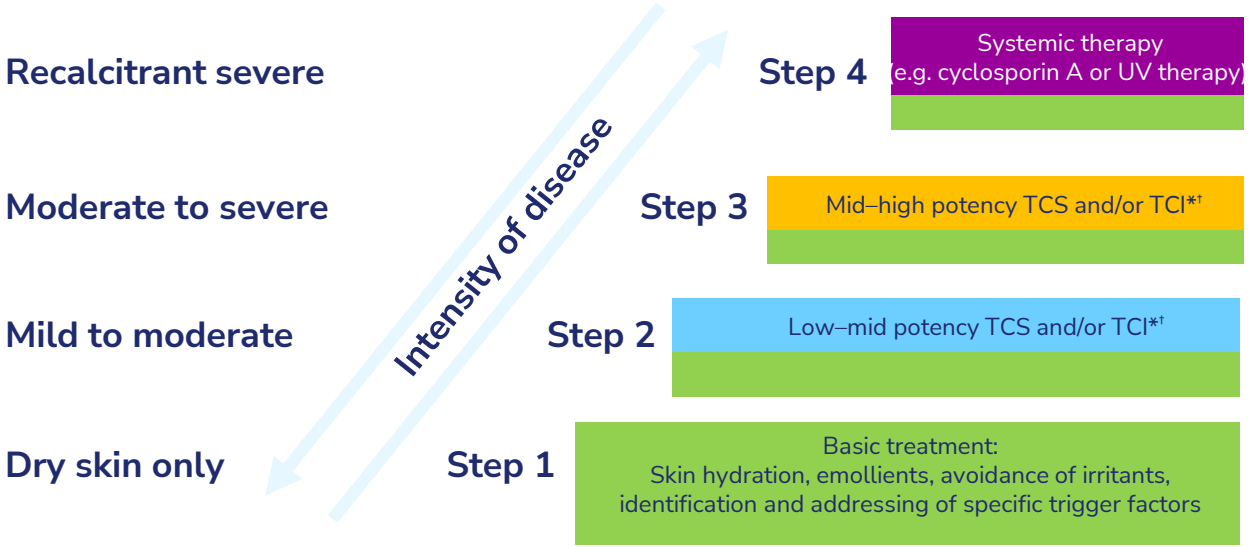
- Dry, cracked, and polygonally fissured skin with irregular scaling
- Commonly occurs on the shins, but may occur on the hands and the trunk
- Tends to run chronic recurring course - episodic and does not resolve within a few days, but persists over months and years
- Can be intensely pruritic and disturb sleep

Asteatotic Eczema

- Itchy – scratch cycle



Itchy – scratch cycle



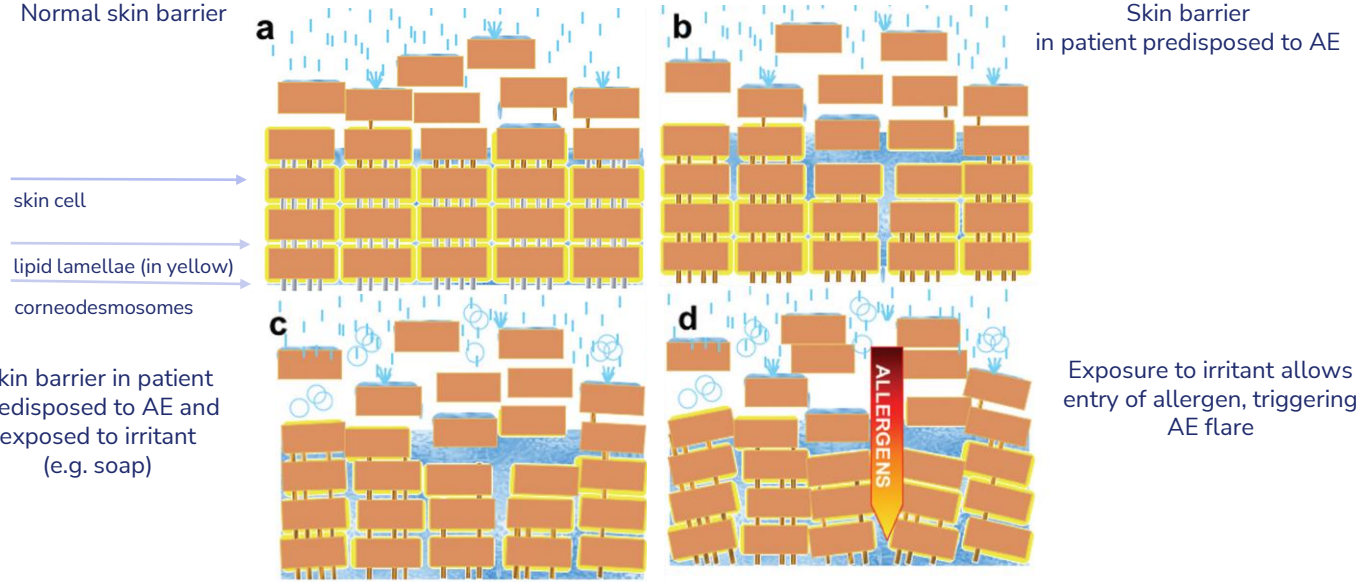
Management

- Skin care
- Medication

Skin Care

- Take short baths with decreased water temperature
- Eliminate or reduce the use of strong soap
- Apply more moisturizer
- Decrease in severity of eczema
- Decrease in use of steroid

Skin Care



Cork et al. *J Allerg Clin Immunol*. 2006;118:3–21.

Skin Care

- **Effective, active and first-line therapy** for all dry skin diseases, including eczema

- **Rehydrates dry skin** and maintains a **protective barrier against moisture loss**, keeping the skin soft and trap water to prevent water loss

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Skin Care - moisturizer

- How to choose
  - No greasy feeling
  - Easy to apply
  - Stable
  - Fragrance free

Skin Care - moisturizer

- Mainstay of treatment for more than 50 years
- Until 2001, corticosteroid treatment was the only way to deliver potent anti-inflammatory therapy topically to the affected skin in eczema
- Safe if use correctly
- Prescription drug -- Used under supervision

Skin Care - topical steroid

Possible side effect if self medicated

- Atrophy, striae
- Telangiectasia
- Acneform, rosacea-like reactions
- Pigmentation abnormalities
- Ocular hypertension,
  glaucoma, cataract

Other medications

- Oral steroid
- Oral cyclosporin
- Non steroid medication e.g. PDE4 inhibitor
- Biologics
- UV light treatment

Case sharing - Asteatotic Eczema

- M/68
- Good past health
- Itchy rash over left foot

- Allergic contact dermatitis second to bone-setting medications
- Bone setter dermatitis
- Management
  - Remove culprit
  - Topical steroid
  - Oral antihistamine
- May need admission if condition very serious

Tinea pedis

- Interdigital tinea pedis = athlete's foot = Hong Kong Foot (Wikipedia)
- Cause: fungal infection
- Typically affects the feet, it can spread to other areas of the body, including the nails and groin
- Features:
  - Pruritus, stinging/burning, peeling, maceration, fissuring, erythema of affected area

Tinea pedis

- The most frequent fungal infections
- 70% of the population will be infected with tinea pedis at some time
- Probably higher incidence in certain targeted groups
- No seasonality but more common at warm weather (summer)

Predisposing factors

- Bathrooms, changing rooms and swimming pools
- Walking bare foot or sharing a towel
- Wear occlusive footwear
- Wear the same pair of socks or shoes for long periods
- Sweat excessively
- Some form of immune deficiency e.g. medication such as azathioprine

Diagnosis

- Commonly by clinical history and physical examination
- Confirmatory test (though seldom necessary)
  - Direct microscopy of a potassium hydroxide preparation
  - Fungal culture
  - Skin biopsy -Fungal elements within the stratum corneum with special stain

Treatment

- Local antifungals – topical medications
- For 1 to 4 weeks
- Spray, powder, cream, or gel
- Resistant case, oral antifungal medication may be needed

Case sharing - Tinea pedis

- M/73
- History of DM
- Itchy rash over trunk

- Tinea infection
- Topical antifungal medication
- May need oral antifungal medication if not responsive

Skin cancer - Epidemiology

- Non-melanoma and melanoma
- As in 2017
  - Accounted for 3.6% of all new cancer cases
  - Age-standardised incidence rates
    - 7.6 (non-melanoma) and
    - 0.7 (melanoma) per 100000 standard population
- As in 2018
  - non-melanoma rank 8th commonest newly diagnosed cancer

Risk factor of Skin Cancer

- Exposure to ultraviolet (UV) radiation
  - from the sun / tanning beds
  - from therapeutic treatment (e.g. eczema, psoriasis)
- Presence of many moles on the body
- Have pigmented spots, such as solar keratosis caused by chronic exposure of UV light radiation
- Genetic predisposal (e.g. xeroderma pigmentosum, family history)

Basal cell carcinoma (BCC)

- The most common type of skin cancer
- On sun-exposed areas of the body
- Usually appears as a small, shiny pink or pearly-white lump. It can also looks like a red, scaly patch
- It usually grows so slowly and may become crusty, bleed or develop into a painless ulcer

Squamous cell carcinoma (SCC)

- On sun-exposed skin
- Appears as a firm pink lump with a rough or crusted surface. Can have a lot of surface scale and sometimes even a spiky horn sticking up from the surface
- Feels tender when touched, bleeds easily and may develop into an ulcer
- Can be highly aggressive

Management of SCC and BCC

- Depending on multitude of factors
- By surgery, cryosurgery or radiotherapy

Malignant Melanoma

- Most lethal of all the skin cancers
- Causes unclear yet
- Can occur anywhere
- The lesion tends to be circular, with irregular outer portions
- The margins of the lesion may be flat or elevated and palpable

Malignant Melanoma

- Treatment for small, superficial lesions is surgical excision
- Deeper lesions require wide local excision, and skin grafting may be needed
- Regional lymph node dissection is commonly performed to rule out metastasis
- Recent advancement: immunotherapy

Case sharing - Skin cancer

- M/87
- History of DM
- Itchy growth over forehead for few months
- Wart
- Not a cancer but infectious
- Cryotherapy
- Excision

Herpes zoster

- Painful vesicles
- Usually restricted to unilateral dermatome
- In immunosuppressed patient, may spread to multiple visceral organs and multiple dermatomes (disseminated zoster)

Epidemiology

- Due to reactivation of previous varicella-zoster virus infection
  - Cumulative over a lifetime: 10-20% of those with primary infections

Epidemiology

- High-risk
  - elderly, immunocompromised
  - Cumulative incidences 50%
- Incidence increases with age: 50% in those individuals - age 85 years

Phase

1. Pre-eruptive phase (pre-herpetic neuralgia)
2. Acute eruptive phase
3. Chronic phase (post-herpetic neuralgia)

Possible complications

- Bacterial skin infection
- Scarring is common
- Lesions over the mouth make it difficult for patients to eat and drink
- Lesions over the eye region may affect vision

Treatment

- Shorten the clinical course
- Provide analgesia
- Prevent complications
- Decrease the incidence of postherpetic neuralgia

- Acyclovir, famciclovir, and valacyclovir: started within 72 hours of the onset of rash may reduce the severity and duration of acute pain, as well as the incidence of postherpetic neuralgia

Case sharing - Herpes zoster

- F/66
- Good PH
- Painful rash over back for few weeks
- Folliculitis
- Topical antibiotics
- Oral antibiotics

Reflection

- In an long term care setting, an older adult told you that he had itching skin and you found there were some rashes on his skin
- What is the possible skin disorder that he suffered from?
- What can you do for him?

Bullous pemphigoid

- Bullous pemphigoid and scabies are common skin disorders in long term care setting
- Let's learn about it!

Bullous pemphigoid

- Autoimmune subepidermal blistering disease
- Commonly occur at pressure / friction area

Bullous pemphigoid

- More prevalent in older patients with neurological disease, in particular cerebral vascular accident, dementia, Parkinson disease
- May associate with internal malignancy in some patients
- Medication or skin infection can trigger the disease

Complications

- Bacterial infection and sepsis
- Viral infection with herpes simplex or herpes zoster
- Complications of treatment e.g. oral steroid

Diagnosis and Treatment

- Diagnosis can be confirmed by skin biopsy
  - characteristic histopathology
  - immunofluorsence staining features
- Treatment
  - systemic steroid
  - topical steroids used to treat localized bullas
  - other options: azathioprine, dapsone, intravenous immunoglobulin (IVIG)

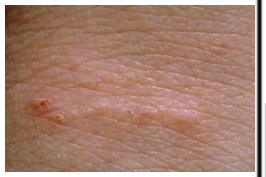
Scabies - Topic of concern

- Reported prevalence of 5.8% among local residential care homes
- Severe itchy
- Contagious
  - Person to person
  - Object to person (Fomites)

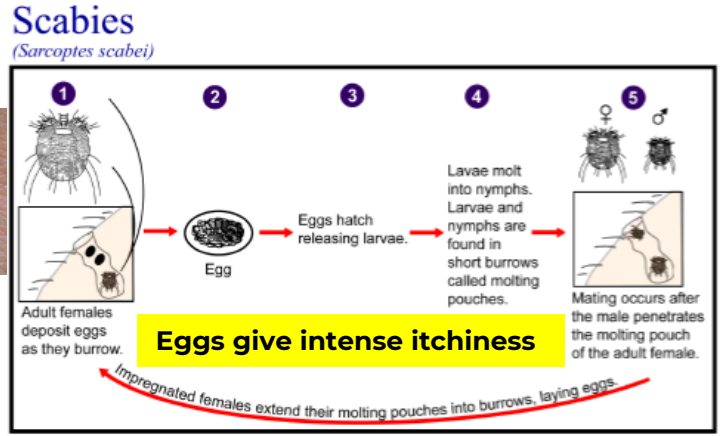
Scabies - Topic of concern

- Stringent infection control measures required
  - Not a statutory reportable disease
  - Potential institution (residential care homes) outbreaks
  - Advisable to report to Centre for Health Protection

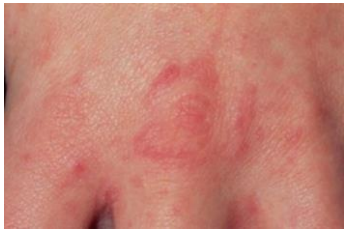
Scabies life cycle accounting clinical features



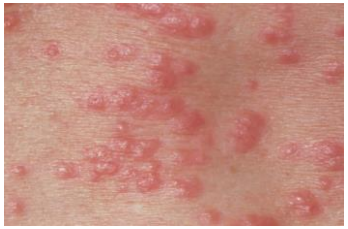
Burrows



Eggs give intense itchiness



Burrows and pouches



Sources: (photos) https://www.nhs.uk/conditions/scabies, (Graphics) https://phil.cdc.gov/details.aspx?pid=3416

Typical site involved

- Scabies like warm and humid condition
- Typically areas under bedding / clothing plus
  - Axilla
  - Pubic region
  - Wrist / Web space
  - Knee flexor

  (to start with)
- Can occur on face (Norwegian scabies – see later)

Management - kill the bugs

- First line -- Topical preparation
  - Permethrin most effective (>90% success rate)
  - Other commonly used preparation: benzyl benzoate, crotamiton
  - Apply to WHOLE BODY from neck downwards (NOT just skin lesion)
  - Allow the scabicide to dry (> 8 hours)
  - Take a hot bath after 24 hours, and wear new clean clothes (avoid scabies hiding in clothes and get re-infected)

Management - kill the bugs

- Benzyl benzoate
  - Irritating, needs to apply twice over 24 hours
- Crotamiton
  - Used if very fragile skin to avoid irritation
  - Helps with post-scabietic pruritus
  - Needs to apply for consecutive 5 days

Management - second line and control of pruritus

- Second line – oral treatment
  - Ivermectin
    - off label use
    - to be used only after balance of risk and benefit
- Pruritus
  - Due to allergic reaction from eggs
  - May persist up to 2 weeks after success treatment
  - Adjunct therapy with anti-histamine, calamine lotion, judicious use of local steroid

Management - fomites and infection control

- Fomites (clothes, bedding etc.) management
  - All bed linens to be washed and heat dry (at 60˚C for at least 10 minutes)
  - Put clothing that cannot be washed in sealed bag for at least 7 days until the mites die
- Infection Control
  - Single case: Laborious screening of all RCHE residents, staff and visiting family members required
  - Outbreak: prophylactic treatment recommended
  - Advice from Centre for Health Protection

Special issue in older adults

- Crusted scabies / Norwegian scabies (highly infested and infectious)
  - Need to trim down / remove crust / nail for treatment to be effective
  - May require repeated treatment over 1- 2 weeks
- Atypical presentation
  - Form: Eczema, bullous, erythroderma
  - Distribution: at back / trunk, lack of finger web lesions
  - At face (especially Norwegian scabies)
- Presence of one skin condition does not exclude concomitant scabies

Summary

- Age related skin changes and prevention of accelerated changes
- Recognition of common skin conditions in older adults
  - Asteatotic eczema
  - Tinea infection
  - Skin cancer
  - Herpes zoster
  - Bullous pemphigoid

Summary

- Details on prevention / management of asteatotic eczema and scabies
- Brief overview on management of other common conditions that require physician consultations
- Importance of infection control measures to prevent recurrent scabies

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