



# **Episode 4.05 Show Notes Skin**

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# **Learning Outcomes**

## Knowledge:

- To understand normal physiology of the skin and how it changes in older adults
- To develop an understanding on how to manage dry skin in older adults
- To understand causes of itchy skin as a presenting complaint

#### Skills:

• To be able to recognise different emollients and how emollients they should be used.

## **Attitudes:**

- Recognise dermatological issues can be a manifestation of an underlying systemic medical problem
- To consider visual assessment in those falling, with delirium and as part of a CGA.

## **Definitions:**

- Xerosis skin that is dry to touch, due to lack of moisture in the outer layer of the skin (stratum corneum), resulting in cracked skin
- Pruritus itchy skin or unpleasant sensation that provokes the desire to scratch



## **Key Points from Discussion**

## Ageing skin physiology

See also Series 3 episode 3

- Protection:
  - Accumulation of UV damage as people age
  - Cell aging via loss of telomere ends
- Barrier:
  - Decreased sebum protection
  - Epidermal thinning; flattening of dermo-epidermal junction;
- Pain receptor:
  - Dermal thinning → reduction in nerve endings → decreased sensation
  - Neuropathic pain increases
- Thermoregulation
  - Dermal thinning → reduced function to thermoregulate: hypothermia more common
  - Reduced moisture retention
  - Reduced ability to vasodilate in the capillary bed → prone to heat retention
- Endocrine function (Vit D. melanin)
  - Decreased ability to synthesis vit D → prone to vit D deficiency/reduced bone density
  - Decreased ability to synthesis melanin → prone to skin cancers (in addition to photodamage done in previous years)
- Communication/Visual appearance
  - Wrinkling/Sagging of skin
  - Loss of demarcation between chin and neck in males

#### Dry skin

- Causes:
  - o Genetic: Ichthyosis
  - o Age related changes
  - o Dry environment, low humidity
  - o Drugs: retinoids, diuretics, EGFR inhibitors
  - o Postmenopausal





- o Medical causes: hypothyroidism, CKD, malnutrition, dermatitis/eczema
- Complication:
  - o Eczema, infection (through cracks in skin allowing infection in), contact allergy
- Management
  - o Emollients, emollients, emollients
  - o Things to consider:
    - Severity of the dryness
    - Tolerance
    - Personal preference
    - Cost and availability
  - o Avoid aqueous cream as an emollient choice
- Further reading:
  - o Dry Skin (https://www.dermnetnz.org/topics/dry-skin/)

## **Itchy skin**

#### Causes:

- Systemic:
  - Renal: Chronic renal failure buildup of urea and waste materials
  - Liver: Cholestatic buildup of bilirubin
  - Endocrine/metabolic: DM; hyperthyroidism; hypoparathyroidism
  - Hematological: IDA; polycythaemia; leukaemia; lymphoma
  - Neurological: neuropathic pruritus
  - Psychogenic: skin picking; depression; anxiety; delusional parasitosis
  - Oncological: can precede underlying malignancy such as lymphoma by many years
- Skin diseases:
  - Psoriasis, Urticaria, Allergic contact dermatitis, Dry skin, Dermatitis herpetiformis, Scabies, Mycosis fungoides
- Exposure-related:
  - Allergens/irritants check contacts and exposures
  - Insects/infestations (i.e. bed bugs)
  - Medication (i.e opioids as side effect)

## Pruritus screen

- Bloods can look for signs of the systemic diseases above
- Consider:
  - Antimitochondrial antibody autoimmune conditions





- CXR
- Immunoglobulins
- Plasma electrophoresis

Management: Treat underlying cause; Emollients, emollients, emollients

Elderly Hospitalised Patients - The Impact of Itch and It's Prevalence. <u>Teoh et al, 2016.</u>

<u>Annals of Academic Medicine Singapore</u>

Prevalence of skin diseases in hospitalized geriatric patients: Association with gender, duration of hospitalization and geriatric assessment. Makrantonaki et al 2017

## **Cutaneous Vasculitis**

This is a complex collection of conditions with many different causes. Vasculitides are classified by the size of the vessels affected; small, medium or large.

Older people are most likely to get small vessel vasculitis

- Presents with raised palpable purple areas called purpura, or occasionally ulcers

## Diagnosis

- Biopsy - histology shows inflamed blood vessels

#### Reactive vasculitis

- E.g. Secondary to acute infection
- Tends to settle in 6-8 weeks
- Supportive measures- emollients, topical steroids, light compression

Vasculitis secondary to underlying inflammatory process

- May be more severe and persistent
- Need to manage underlying condition

Further reading: https://www.dermnetnz.org/topics/cutaneous-vasculitis





## **Blistering conditions**

Autoimmune basis

Usually require immunosuppression with steroids +/- steroid sparing agent

- Bullous Pemphigoid
- Pemphigus vulgaris

#### **Resources:**

Videos of how to apply emollients, and topical steroids. http://www.bad.org.uk/for-the-public/patient-information-videos

# **Curriculum Mapping:**

This episode covers the following areas (n.b not all areas are covered in detail in this single episode):

Curriculum	Area			
NHS Knowledge Skills Framework	Suitable to support staff at the following levels:  • Personal and People Development: Levels 1-2  • Service Improvement: Level 1			
Foundation curriculum	Section 2 4 10	Title Patient centred care Self directed learning Support for patients with long term conditions		
Core Medical	Common competences:			





Training	<ul> <li>The patient as central focus of care</li> <li>Managing long term conditions and promoting patient self-care</li> <li>System specific competences:</li> <li>Dermatology</li> <li>Geriatric medicine</li> </ul>	
GPVTS program	Section 3.05 - Managing older adults	
ANP (Draws from KSF)	Section 6 Clinical Examination Section 7.31 Problems with Skin Section 20 Patient as central focus of care	

## Feedback

We will add feedback to this as we receive it! The website will have the most up to date version always available: <a href="www.thehearingaidpodcasts.org.uk/mdtea">www.thehearingaidpodcasts.org.uk/mdtea</a>

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Check out our cool infographic *A sip of MDTea Episode 4.05* summarising 5 key points on Ageing Skin. It's made for sharing!

