Making sense of emollients and care of dry skin

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Aims

• To provide an update on the recognition and current management of the most common skin conditions – focussing on those where dry skin is a problem
• To describe the advice that is helpful to customers, including products to recommend
• To show the importance of MURs for patients with dermatological diseases

Learning objectives

After attending this session participants should be able to:

• Identify which emollient products are simple occlusives, humectant-containing, antiseptic containing and oil-free and describe how their properties make them suitable for specific needs.
• Describe how to use emollient products to obtain the best effects
• Identify patients for whom emollient therapy should be optimised and suggest suitable products to match patients’ needs and preferences

Lecture outline

• Introduction
• Normal skin and dry skin
• Emollients – how they work, why some are better than others
• The Eucerin product range
• Case scenarios: Advising customers, caring for patients (interactive session)
• Summary & wrap up

Quiz question

Which of these best describes your role in the pharmacy?

1) pharmacist
2) pharmacy technician
3) counter assistant
4) other
Underpinning knowledge

Skin
- Normal skin, dry skin & causes; General approach to treating dry skin

Diseases
- Common conditions in which dry skin is a problem; Treatment guides

Products
- Properties of different emollients; what to choose when; how to use for best effect

People
- Treating individuals
- Advising customers
- MURs for patients

Dry skin - a common problem

Joanna (28 years) has always had sensitive skin but now she has developed rough, dry skin on her hands that make it difficult for her to care for her children.

Gina (29 years) suffers from rosacea with a persistently red face but the skin on her face feels dry and sore.

Karima (37 years) suffers from ‘winter itch’ - her skin becomes dry and itchy in recent years.

Steve has psoriasis that is controlled with Dovobet but dryness and cracking of plaques continues to be a problem for him.

Gina (29 years) suffers from rosacea with a persistently red face but the skin on her face feels dry and sore.

Dry skin & impaired skin barrier

Healthy skin
- Smooth skin with intact barrier function

Damaged skin
- Rough, flaky skin Weakened barrier function

Features of dry skin

- Feeling of tightness esp after washing
- Loss of plumpness
- Feeling and looking rough (vs smooth)
- Itching
- Flaking, scaling
- Fine lines
- Redness
- Cracking, fissuring, bleeding

Skin structure

- Stratum corneum
- Granular layer
- Spiny/prickly layer
- Basal layer
- Corneodesmosomes
- Intercellular lipids

The ‘bricks and mortar’ of the horny layer

- Tightly-packed, well-hydrated (NMF) cells
- Corneodesmosomes
- Intercellular lipids

Skin barrier
The skin barrier

- Essential for keeping water in and allergens, irritants and microbes out
- Made up of:
  - The intercellular lipid envelope
  - Tightly-packed, well-hydrated cells
  - Corneodesmosome links
- Other

Factors that impair the skin barrier

- Deficiency of filaggrin (the starting material for NMF)
  - Genetic variations
  - Down-regulation by Th2 cytokines – IL4, IL13 (in eczema)
- House dust mite (HDM) proteases
- Staphylococcus aureus superantigen
- Exposure to solvents, soap
- Dry environment
- Contact allergens and irritants
- Repeated rubbing or scratching
- Age effects
- Drug treatment
- Systemic diseases e.g. diabetes mellitus, hypothyroidism
- Other Including UV treatment and radiation therapy

Note: more than one factor can be present in an individual

Age-related changes in the skin barrier

People at risk of developing dry skin

Those with:
- Eczema (all types)
- Filaggrin deficiency
- Deficiency of NMF
- Psoriasis
- Ichthyosis
- Diabetes and hypothyroidism
- Age over 50 years
- Infant skin
- Renal failure

Those exposed to:
- Detergents & solvents
- Soaps
- Dry environments
- Contact allergens and irritants
- Certain drugs (incl. acne tx)
- UV treatment (PUVA and NBUVB)
- X-ray therapy

Dry skin and treatment guidelines

- Eczema – NICE CG 57, SIGN 125
  - stepped care, emollients at all stages
- Psoriasis – NICE CG 153, SIGN 121
  - emollients all the time
  - emollients +/- humectants, +/- keratolytics all the time
- Rosacea – NICE CKS 2016
  - Hypoallergenic emollients, if skin dry
  - High-factor (SPF 30 or more) sunscreen

Managing dry skin

- Avoid factors that cause further drying
  - Soap, detergents, solvents, drying environments, irritants, long hot baths etc.
- Protect skin when necessary
  - Gloves, barrier creams
- Find suitable product(s) & use properly
  - Lipid-rich, humectant-containing
  - Use an emollient wash product
Emollients, ingredients and products

Actions of emollients

• Trap water in the stratum corneum
• Mimic the barrier effects of the deficient lipids
• Cosmetic
• Anti-inflammatory effect
• Steroid sparing effect

Complete Emollient Therapy

– Principle: protect skin from soap and detergents; apply emollients frequently.
  • Topical emollients after bathing and at other times
  • Emollient soap substitutes
  • Emollient bath oil
  • Avoid soaps and detergents
– Education/explanation is key
  • Explain purpose
  • Negotiate achievable regimen
  • Demonstrate correct application

Emollients - the basics

• Creams (o/w), ointments (w/o, o), lotions (o/w, w/o)
• Simple (occlusive) vs complex (additional ingredients e.g. humectants, ceramides)
  – Simple – only work while present
  – Complex – longer-lasting effects
• Creams – emulsifier, preservative
• Creams support microbial growth – avoid contamination in use
• Oil-free moisturisers, ‘non-comedogenic’

Humectants 1

Humectants 2
Four-week, double-blind, vehicle-controlled epidermal hydration study in patients with aged dry skin

Schölermann 1998. Efficacy and safety of Eucerin 10% Urea Lotion in the treatment of symptoms of aged skin

Humectant-containing emollients

- Urea, lactic acid, PCA - components of NMF
- Urea 5%, 10%; usually well absorbed, not sticky; can sting or burn occasionally
  - Eucerin products, Calmurd 10%, Hydromol Intensive
- Glycerin (up to 50%); high concentrations can be sticky
  - Neutrogena Dermatological, Doublebase Dayleve, Aveeno
- Effects always last longer than simple occlusive emollients

Humectant-containing emollients

Recommended for “first line use in cases where simple emollients are not effective or greasier products are unacceptable e.g. for older patients and for patients with psoriasis”

Moncrieff G et al. Clinical and Experimental Dermatology, 2013; 38: 231 - 238

Oil-free moisturisers

- Oil-free = non-comedogenic
- Silicones (dimethicones, cyclomethicone) instead of synthetic or natural oils
- Useful in acne pts and when normal moisturisers cause ‘break-outs’.
  - Eucerin DermoPURIFYER Adjunctive Hydrating Care; Neutrogena Visibly Clear; Cetaphil Moisturising Cream

Useful ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Properties/action</th>
<th>Example products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceramides</td>
<td>Component of skin lipids; acts to restore skin barrier</td>
<td>Balneum Cream, Cetaphil Restoraderm, AtoControl Acute Care Cream</td>
</tr>
<tr>
<td>Lauromacrogols</td>
<td>Anti-itch properties</td>
<td>Eucerin DermoCapillaire, Balneum plus Cream, E45 Itch Relief</td>
</tr>
<tr>
<td>Lanolin</td>
<td>Emollient ingredient (hypoallergenic lanolin)</td>
<td>Nivea, E45</td>
</tr>
<tr>
<td>Oat-derived</td>
<td>Soothing action</td>
<td>Aveeno</td>
</tr>
<tr>
<td>Antiseptics</td>
<td>Antibacterial</td>
<td>Dermol, Oilatum Plus bath oil</td>
</tr>
<tr>
<td>Hyaluronic acids</td>
<td>Potent humectant; component of skin</td>
<td>Eucerin Hyaluron Filler</td>
</tr>
<tr>
<td>Sunscreens</td>
<td>Protection against UVA, UVB or both</td>
<td></td>
</tr>
</tbody>
</table>

Emollient wash products & bath additives

- Essential part of CET – soap substitute
- NOT as extra emollient but to minimise removal of skin lipids
- Emollient wash – does not foam like soap but removes sweat and grime
  - Eucerin Replenishing Body Wash, Cetaphil Gentle Cleanser, Aveeno Body Wash, Doublebase Emollient Shower Gel
- Use cream/lotion (o/w) to wash in emergency
- Bath oils (oil + dispersant)
Potential allergens & irritants

- Perfumes – use unperfumed products for infants, atopic individuals
- Preservatives
  - Use ointments for infants, atopic individuals
  - Avoid methylisothiazolinone
- Antiseptics – benzalkonium chloride; allergy reported
- Sodium lauryl sulphate (SLS) …..Aqueous Cream BP
- Other

What can go wrong?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Diagnosis &amp; solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-adherence (not using/not using enough)</td>
<td>Misunderstanding of when &amp; how much to use – explain when and how much to use</td>
</tr>
<tr>
<td>Rubbing in and making itching worse</td>
<td>Misunderstanding about how to use - &quot;rubbing the goodness in&quot; – explain need to for swift, light strokes in direction of hair growth</td>
</tr>
<tr>
<td>Cream contaminated with bacteria making eczema worse (infected eczema)</td>
<td>Open pot of cream, repeated use of dirty fingers – explain problem, discard product, recommend alternative pack (e.g. pump dispenser) + not keeping for long period</td>
</tr>
<tr>
<td>Allergy to ingredient making eczema worse</td>
<td>Can cause unexplained worsening of eczema. Change to unperfumed ointment &amp; try to identify allergen</td>
</tr>
</tbody>
</table>

Emollients - non-adherence

- Non-adherence occurs because:
  - Of misunderstanding about how much/how frequently emollient should be used
  - Difficulty in applying the emollient
  - Dislike of smell/feel of emollient
  - Inconvenience – e.g. sticky fingers, damage to clothing
  - Ineffectiveness of product
- Adherence can be improved by:
  - Discussion with client/patient about what they want/need e.g. non-sticky, long-lasting product
  - Explanation of how much/why to use
  - Helping to select suitable products
  - Providing testers wherever possible

Quiz question

The purpose of complete emollient therapy is to

1. Ensure that the most suitable emollients are used in each area of the body
2. Restore the skin by optimal use of emollients
3. Protect the skin from soaps and detergents at all times
4. 2 and 3

Quiz question

A humectant-containing emollient

1. Is just a more expensive emollient
2. Draws water into the skin from the dermis
3. Draws water into the skin from the atmosphere
4. Increases trans-epidermal water loss

The Eucerin product range

The Eucerin product range includes a variety of emollients designed to address different skin concerns. The range is suitable for all skin types, including sensitive skin, and offers various products for specific areas of the body, such as face, hands, and feet. Each product is formulated to be gentle and effective, providing long-lasting hydration and protection against dryness and irritation. The range includes a wide selection of moisturizers, lotions, and creams, each offering unique benefits tailored to specific skin needs.
**Eucerin Dry Skin Range**

- Products for face, body, hands and feet
- 5% or 10% urea ± glycerin ± ceramide 3
- Rapidly improves skin barrier function (↓TEWL)
- Rapidly improves roughness, redness, scaling

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**Soap substitutes**

- 5% Urea
- Lactate
- Fragrance free
- Shower gel format

**Products specifically for the face**

- 5% Urea
- Lactate
- Fragrance free
- Bath & Shower Oil

- 5% Urea
- Lactate
- Non-comedogenic
- Ideal under makeup and after shaving

- 5% Urea
- Lactate
- Non-comedogenic
- Fragrance free

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**Hands and feet**

- 10% Urea
- Lactate
- Fragrance free

**Other products**

- Aquaphor Soothing Skin Balm
  - Water-free formulation
  - Supports skin regeneration
  - Suitable for dry, damaged or irritated (scaly, itchy) skin
  - Suitable for all parts of the body including face and hands

- DermoCapillaire Shampoo and Scalp Treatment
  - 5% Urea
  - Mild shampoo with polidocanol – anti-itch properties
  - Scalp treatment in addition contains Licorice Extract
  - Suitable for dry, itchy scalp

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**Dry skin products**

- 10% Urea
- Lactate
- Lotion format

- 10% Urea
- Lactate
- Cream format
Eucerin AntiREDNESS

- Eucerin AntiREDNESS Concealing Day Cream SPF25 +UVA
- Eucerin AntiREDNESS Soothing Care
- Both products contain Licochalcone A and Symstive → reduce inflammation, irritation
- Concealing Day Cream contains green pigments to neutralise redness

Treating and advising individuals

Case scenarios - format

- Scenarios to illustrate the patient pathway through the pharmacy
  - Counter advice
  - MUR /Rx medicines advice
- Reminder – key points
- Use of Skin Care Guide table p23-25
- MCQs

Case scenario 1

Jane is a 55-year-old woman collecting her first prescription for HRT. She says that her (previously normal) skin has felt increasingly dry and itchy over the past few months and she now needs ‘a good skin cream’ for her face and a cream for her legs where the skin has become dry, flaky and terribly itchy.

What advice do you offer?

Age-related changes in the skin barrier

Jane is a 55-year-old woman collecting her first prescription for HRT. She says that her (previously normal) skin has felt increasingly dry and itchy over the past few months and she now needs ‘a good skin cream’ for her face and a cream for her legs where the skin has become dry, flaky and terribly itchy.

What advice do you offer?
Quiz question

What is the purpose of emollient treatment for Jane?

1. To relieve/minimise itching
2. To restore suppleness and smoothness to the skin
3. To combat the effects of HRT
4. 1 and 2

Eczema - the basics

- Atopic eczema (AE) ~20% children, up to 10% adults
- AE (ass’d w hayfever, asthma); allergic and irritant contact eczema + other types
- Inflamed, itchy, sore, red skin esp in creases
- Inflammatory skin disease - relapsing & remitting course
- AE underlying cause - genetic defects → weakened skin barrier – ‘A gene-environment interaction’
- Triggers – allergens (e.g. HDM, animal dander), irritants, seasonal change, stress; ‘Winter itch’
- Eczema = dermatitis
- Quality of life ↓ ↓ ↓

NICE stepped care plan

- Match the level of treatment to the severity of disease then step up or down according to response
- Use emollients all the time

Topical steroids

- Moderate-potent topical steroid to control flare-ups of eczema
- Educate about wise use of topical steroids
  - Correct amount – 1 FTU → 2 hand areas1 or ‘faint sheen’
  - Discourage inappropriate use (not an emollient)
  - Rule of thumb: steroid: emollient = 1:10 (quantities)2
  - Tackle confusion between potency and concn.
  - Tackle steroid phobia
    • 24% patients admitted to not using steroid because of fears about side effects3
- Label with potency4

References:
4. NICE guideline 57. Atopic eczema in children 2007
**Case scenario 2**

Amina is a 28-year-old woman whose eczema flared up last year after her father died. She has a prescription for Eumovate Cream, 'as directed'. She mentions that the doctor originally gave her a prescription for two creams (Eumovate and Diprobase) but this one is much nicer so she has decided not to bother with the other one.

You invite her for a MUR.

During the consultation she tells you that she disliked the smell and feel of the other cream. She also says she is a bit disappointed because her eczema has not completely resolved.

What are the medicines use issues here?

What advice can you offer?

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**Case Scenario 3**

Joanna is a 28-year-old woman who has always had 'sensitive skin'. She has recently had her second child and is concerned that 'now she is forever washing her hands' the skin of her hands has become very dry and rough and even 'catches' on fine fabrics.

What do you suggest?

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**Quiz question**

Which of these types of products are you most likely to recommend?

1. A hand cream containing 5% urea
2. Rubber gloves
3. A water-in-oil emollient
4. A hand cream containing glycerin

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**Case scenario 4**

Amber’s son Daniel is eight months old and has been diagnosed with atopic eczema. He has sore, inflamed patches on his face. Amber is upset because people have been telling her she should take better care of him.

The doctor has prescribed hydrocortisone ointment.

You recommend a lipid-rich, humectant-containing emollient cream that is suitable for young children. What should Amber do now?

1. Use the cream instead of the hydrocortisone ointment
2. Use the hydrocortisone ointment alone
3. Apply the hydrocortisone ointment, then the emollient cream
4. Apply the emollient cream then the hydrocortisone ointment

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**Eczema - MUR tips**

- Check regular emollients, wash products, tx for flares
- Check response/effectiveness
- Consider if emollient with humectant or anti-itch needed
- Importance of emollient treatment even when ‘clear’ & with TCS
- Application technique: generously, frequently, quickly
- Importance of suitable emollient wash product
- Treat flares promptly with TCS (appropriate potency for site) – keep supply
- STEP DOWN TCS when inflammation subsides
- Chronic disease – maintenance treatment?
Psoriasis

Psoriasis - the basics
- Chronic, inflammatory skin disease; relapsing & remitting
- Affects up to 2% population
- About 90% – chronic plaque psoriasis
- Well-demarcated plaques of inflamed, thickened, scaling skin
- Psoriatic arthritis ~ 42%; Scalp 50-80%; nails 50-86%
- Thick ‘silvery’ scale, shedding of flakes
- Cracking and bleeding
- Visible plaques – hands, face, hairline
- Quality of life ↓ ↓ ↓

Mild-moderate psoriasis
- Emollients
- Topical corticosteroids
- Vitamin D / analogues (e.g. calcipotriol)
- Coal tar
- Topical calcineurin inhibitors

Emollients for psoriasis
- Restore pliability, improve appearance
- Reduce shedding of skin scales
- Help to prevent cracking and bleeding
- Use frequently and generously
- Find the products that suit individual
  - Humectant-containing products
  - Wash products
  - Bath emollients

Case Scenario 5
Steve is an accountant who has suffered from intermittent flare-ups of psoriasis for the past 15 years. He keeps some Dovobet gel at home and uses this to bring flares under control and then discontinues treatment.
In between episodes he finds the skin on his hands, elbows and shins gets very dry. At present the dry plaques on his hands and elbows are a problem because the skin sometimes cracks and bleeds, which he finds embarrassing.

Quiz question
How should Steve be advised?
1. Use the Dovobet continuously rather than intermittently
2. Use an emollient when not using the Dovobet
3. Use an emollient all the time
4. 1 and 3
**Quiz question**

Which emollient products are you most likely to recommend for Steve?

1. A humectant-containing lotion
2. A humectant-containing hand cream
3. A simple, all purpose emollient cream
4. 1 and 2

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**Psoriasis - MUR tips**

- Check products for trunk & limbs, face & flexures, scalp.
- Clarify what goes where
- Check emollient use
- Check response/effectiveness
- Clarify time course for response
- Application techniques
- Consider if emollient with humectant or anti-itch needed
- Treat flares promptly with TCS (appropriate potency for site) -- keep supply
- STEP DOWN (TCS/combi b) when plaques flatten
- Chronic disease -- maintenance treatment?

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**Ichthyosis**

- Persistently thick, dry ‘fish-scale’ skin; extensive
- Ichthyosis vulgaris most common ~1 in 250
- Genetic basis
- Scaling, itching, pain (fissuring)
- Tx- restore normal skin barrier, minimise dryness, remove scales
- Emollients ± humectants ± keratolytics
- BMJ Best Practice: Ichthyosis May 2015

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**Other types of dry skin**

<table>
<thead>
<tr>
<th>Type of dry skin</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Older (50yr +) skin</td>
<td>Weakened skin barrier (Hennek epithelium, ↓ water and lipid content + other changes); itching common; post-menopausal changes</td>
</tr>
<tr>
<td>Infant skin</td>
<td>Immature skin barrier, thinner epithelium, ↓ NMF and lipid content, ↓ TEWL</td>
</tr>
<tr>
<td>Diabetes &amp; hypothyroid</td>
<td>Dryness common in type 2 diabetes; problem area -- feet</td>
</tr>
<tr>
<td>Acne</td>
<td>Acne treatments (retinoids, BPO) can dry skin ++</td>
</tr>
<tr>
<td>UV treatment</td>
<td>PUVA and UVB for psoriasis can dry skin</td>
</tr>
<tr>
<td>X-ray therapy</td>
<td>X-ray radiation damages cells in basal layer → skin damage ++ → tight, itchy, sore, peeling skin</td>
</tr>
<tr>
<td>Renal failure</td>
<td>Normal skin + excessive drying</td>
</tr>
<tr>
<td>Normal skin + excessive drying</td>
<td>Exposure to sun, wind, chlorine, water + soap/detergents, air conditioning, long-haul flights</td>
</tr>
</tbody>
</table>

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**Case scenario 6**

Corinna is a 17-year-old student who has been using a benzoyl peroxide product successfully to control her acne but now finds that the skin on her face is uncomfortably dry and flaky. She is particularly anxious because she is going on a beach holiday soon and wants to look her best. What advice can you offer?

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**Quiz question**

What type of product would be most suitable for Corinna?

1) A cream-based benzoyl peroxide 5% product and separate sunscreen product
2) An oil-free moisturiser containing a sunscreen & antibacterial and anti-inflammatory ingredients
3) An alcohol-based sunscreen (gel or spray)
4) An oil-free moisturiser and separate sunscreen product
Acne - MUR tips

- Duration of treatment (min 6/52)
- Area to be treated (all of acne-prone area)
- Realistic expectations re time course for response (improvement: 4/52 – 40%; 8/52 – 80%)
- Need for moisturiser?
- Need for mild wash product?
- Chronic disease ~ maintenance treatment?

Case scenario 7

Karima is a 37-year-old woman who has always had ‘sensitive skin’. She finds her skin very troublesome during the winter months. She says her skin feels “dry and itchy everywhere”. It is visibly flaky on her shins, the skin on her hands is uncomfortably dry and the skin on her face looks and feels dry. She wonders if there is one product she could use everywhere.

Quiz question

Which of these are you most likely to recommend for Karima (in addition to a mild, emollient wash product)?

1) Products containing 5% urea for all areas
2) A non-aqueous general-purpose emollient e.g. Aquaphor, Neutrogena Dermatological
3) Products containing 10% urea for very dry areas and 5% urea for other areas
4) Water-in-oil formulations for all areas

Case scenario 8

Jessica, a 26-year-old woman is complaining of ‘chicken skin’ on her arms. Her doctor has told her that the condition is called keratosis pilaris and it is not serious. He suggested that she should get some cream from the pharmacy, but he did not say which cream. Jessica is quite upset because she wants to wear sleeveless tops in the summer but is embarrassed about her appearance.

What can you suggest?

Quiz Question

Which of the following would be most suitable for Jessica?

1) Any general purpose emollient
2) An emollient containing 5% or 10% urea
3) A redness-concealing cream
4) An emollient containing glycerin

Rosacea

- Affects 2-10% of population
- Four types
  - Erythema-telangiectatic (ETR) (transient/persistent erythema & telangiectasia)
  - Papulopustular (papules, pustules, inflammation)
  - Phymatous (enlarged nose)
  - Ocular rosacea
- Flushing is always a feature; stinging, burning, sensitivity of the skin and intolerance to cosmetics also common
- Triggers – sunlight, emotional stress, hot weather, spicy food, alcohol
- Cause - Up-regulation of trigger-responsive receptors
- Impact on QoL +++ - 42% reported feeling sad or depressed because of skin in one NRS survey
c6 need to include some pictures of red faces
Could we include diagram from Holmes and Steinhoff review?
chrrix, 15/08/2016
Case Scenario 7

Gareth (29) is a keen amateur yachtsman. He is blond, pale-skinned and has always flushed easily when outdoors but now he finds his face is red all the time. He also finds that the skin on his face often feels dry and sore and it is uncomfortable to shave. He is reluctant to see his GP about this.

What advice can you offer?

Dry skin

- Remember
  - skin is individual
  - emollients are 'worn' like cosmetics – smell matters!
- Tailor advice & product recomms to customer
  - See chart for tips
- May need more than one product
- Offer testers if possible
- If offering a number of products to test ensure there is at least
  - one simple occlusive emollient and
  - one humectant-containing emollient

Summary

- Dry skin is common
- Reflects impaired skin barrier due to disease, environmental effects
- Often poorly understood, ineffectively treated
- Effective treatment requires knowledge of skin and products
- Pharmacies can authoritative advice and guidance – 'added value'
- Proper care of dry skin goes hand-in-hand with MURs, medicines optimisation and healthy living advice

Patient support groups

- Inform and support people with skin diseases
- Campaign for people with skin diseases
- The National Eczema Society [www.eczema.org](http://www.eczema.org)
- The Psoriasis & Psoriatic Arthropathy Alliance [www.papaa.org](http://www.papaa.org)
- The Psoriasis Association [www.psoriasis-association.org.uk](http://www.psoriasis-association.org.uk)
- The Ichthyosis Support Group

Background reading

- [Clark CM](http://ExampleURL)  Current thinking on childhood eczema. Pharmacy Magazine CPD Module 184, February 2011
- [Clark CM](http://ExampleURL)  Focus on the Treatment of Psoriasis. Pharmacy Magazine CPD eModule, July 2015