PSORIASIS
BEST PRACTICE IN MANAGEMENT
Objectives

• Discuss pathology of psoriasis
• Review types of psoriasis
• Review triggers and factors affecting disease severity
• Common comorbidity review
• Review first and second line treatment guidelines including assessments.
Pathology of psoriasis

- Inflammatory cell infiltration
- Increased cytokine production
- Hyper-proliferation of skin cells
Recent research suggests that psoriasis is an autoimmune disease. Abnormally large numbers of T-cells trigger the release of cytokines in the skin, causing the inflammation, redness, itching, and flaky skin patches characteristic of psoriasis.
Factors affecting psoriasis

**Triggers**

- **Smoking**
  - Risk factor for palmoplantar pustulosis

- **Trauma**
  - Psoriasis at the injury (Köbner phenomenon)

- **Infection**
  - Streptococcal throat infection is strongly associated with the onset and flaring of guttate psoriasis

- **HIV**
  - Psoriasis occurs at a higher rate in HIV patients

**Affect disease severity**

- **Pregnancy**
  - Psoriasis may improve during pregnancy

- **Drugs**
  - Wide range of medicines thought to exacerbate psoriasis

- **Stress**
  - May worsen symptoms
  - The data is conflicting

- **Alcohol**
  - Heavy drinking more common in psoriasis patients
  - Resulting reduction in compliance

- **Sunlight**
  - Generally beneficial

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Drugs and psoriasis

- Large number of commonly-prescribed drugs can impact on psoriasis

- Drugs that may precipitate or worsen psoriasis include\(^1,^2\)
  - Beta-blockers
  - NSAIDS
  - ACE inhibitors

- Drugs associated with severe deterioration of psoriasis\(^1,^2\)
  - Lithium
  - Antimalarials

- These medications should be taken into consideration during medicines use reviews with psoriasis patients

Common comorbidities

- Psoriatic arthritis
  - Affects around 20% of psoriasis patients\(^1\)
- Inflammatory bowel disease\(^1\)
  - Association documented between psoriasis and Crohn’s disease\(^1\)
- Coronary heart disease\(^1\)
  - Psoriasis may be an independent risk factor for MI\(^1\)
- Lymphoma\(^1\)
- Depression\(^1\)

Healthcare professionals should consider comorbidities in patients with psoriasis and conduct detailed assessment to identify and manage comorbid conditions where necessary\(^1\)

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Risk factors for cardiovascular disease

• Patients with psoriasis have higher risk of:¹
  – Diabetes mellitus
  – Hypertension
  – Hyperlipidaemia
  – Obesity

• Carry out annual CV risk review of severe psoriasis or PsA patients including BMI, diabetes screening, blood pressure measurement and lipid profile¹

¹ Scottish Intercollegiate Guidelines Network (SIGN). Diagnosis and management of psoriasis and psoriatic arthritis in adults; October 2010. Available at http://sign.ac.uk/pdf/sign121.pdf (Last accessed February 2014)
How does psoriasis affect patients?

“Most days I don’t want to start my ritual of putting on my creams and showering ... by the time I’m ready I can’t be bothered to go out.”

“The only treatment that helps is the cream that I have to plaster on every day, but that’s greasy and sticky and doesn’t stop the pain”

“They can say they’re not looking, but I can tell when people are looking”

“I want to challenge the medical profession to take the disease seriously”

1. Psoriasis patients, ‘Exposed’ documentary 2011
GP perspectives

• Two thirds of UK physicians said **patient compliance** was one of the biggest challenges in managing psoriasis\(^1\)

• Half of all GPs surveyed failed to routinely ask psoriasis patients about the quality of life impact
  • 94% blamed this oversight on insufficient consultation time

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1. People with psoriasis are offered an assessment of disease severity at diagnosis and when response to treatment is assessed.

This can be done via:

- Static global assessment score (clear, nearly clear, mild, moderate, severe or very severe) combined with body surface area affected and sites affected

- PASI score (psoriasis area severity index)
Psoriasis coverage & severity

1% = Surface area of the palm.

- **MILD**: Less than 3% of the body has psoriasis
- **MODERATE**: 3%-10% of the body has psoriasis
- **SEVERE**: More than 10% of the body has psoriasis
<table>
<thead>
<tr>
<th>Extent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100</td>
</tr>
<tr>
<td>30 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Erythema</th>
<th>NONE</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
<th>VERY SEVERE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
<td><img src="image3" alt="Image" /></td>
<td><img src="image4" alt="Image" /></td>
<td><img src="image5" alt="Image" /></td>
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</table>

<table>
<thead>
<tr>
<th>Thickness</th>
<th>NONE</th>
<th>MILD 0.25mm</th>
<th>MODERATE 0.5mm</th>
<th>SEVERE 1mm</th>
<th>VERY SEVERE 1.25mm</th>
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<tbody>
<tr>
<td></td>
<td><img src="image6" alt="Image" /></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Scale</th>
<th>NONE</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
<th>VERY SEVERE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="image11" alt="Image" /></td>
<td><img src="image12" alt="Image" /></td>
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<td><img src="image14" alt="Image" /></td>
<td><img src="image15" alt="Image" /></td>
</tr>
</tbody>
</table>
PSORIASIS AREA AND SEVERITY INDEX (PASI) WORKSHEET

HOSPITAL NO.: .................................................................
PATIENT NAME: ..............................................................
DATE OF VISIT: .............................................................

The Psoriasis Area and Severity Index (PASI) is a quantitative rating score for measuring the severity of psoriatic lesions based on area coverage and plaque appearance.

<table>
<thead>
<tr>
<th>Plaque characteristic</th>
<th>Lesion score</th>
<th>Head</th>
<th>Upper Limbs</th>
<th>Trunk</th>
<th>Lower Limbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erythema</td>
<td>0 = None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 = Slight</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 = Moderate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 = Severe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 = Very severe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Add together each of the 3 scores for each body region to give 4 separate sums (A).

**Lesion Score Sum (A)**

<table>
<thead>
<tr>
<th>Percentage area affected</th>
<th>Area score</th>
<th>Head</th>
<th>Upper Limbs</th>
<th>Trunk</th>
<th>Lower Limbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Score (B)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of involvement as a percentage for each body region affected (score each region with score between 0-6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 = 0% - 9%</td>
<td>1 = 1% - 9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 = 10% - 29%</td>
<td>3 = 30% - 49%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = 50% - 69%</td>
<td>5 = 70% - 89%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 = 90% - 100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Multiply Lesion Score Sum (A) by Area Score (B), for each body region, to give 4 individual subtotals (C).

**Subtotals (C)**

<table>
<thead>
<tr>
<th>Body Surface Area</th>
<th>x 0.1</th>
<th>x 0.2</th>
<th>x 0.3</th>
<th>x 0.4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Add together each of the scores for each body region to give the final PASI Score.

PASI Score =
### PASI Score Calculator

#### Head and Neck

Enter skin area involved (palm method) as well as redness, thickness and scale grades for the **head and neck**.

<table>
<thead>
<tr>
<th>Skin Area Involved:</th>
<th>0 palms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redness:</td>
<td>0</td>
</tr>
<tr>
<td>Thickness:</td>
<td>0</td>
</tr>
<tr>
<td>Scale:</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Upper Extremities

Enter skin area involved (palm method) as well as redness, thickness and scale grades for the **arms**.

<table>
<thead>
<tr>
<th>Skin Area Involved:</th>
<th>0 palms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redness:</td>
<td>0</td>
</tr>
<tr>
<td>Thickness:</td>
<td>0</td>
</tr>
<tr>
<td>Scale:</td>
<td>0</td>
</tr>
</tbody>
</table>
Quality statements……

2. People with psoriasis are offered an assessment of the impact of the disease on physical and psychological and social wellbeing at diagnosis and when response to treatment is assessed.

- DLQI (does not assess psychological distress)
- PHQ 9 (to assess for depression)
DERMATOLOGY LIFE QUALITY INDEX (DLQI)

Hospital No: ......................................................... Date: ................................
Name: .................................................................. Score: .........................
Address: .................................................................. Diagnosis: ..............

The aim of this questionnaire is to measure how much your skin problem has affected your life OVER THE LAST WEEK. Please tick (✓) one box for each question.

1. Over the last week, how itchy, sore, painful or stinging has your skin been?
   - Very much
   - A lot
   - A little
   - Not at all

2. Over the last week, how embarrassed or self-conscious have you been because of your skin?
   - Very much
   - A lot
   - A little
   - Not at all
   - Not relevant

3. Over the last week, how much has your skin interfered with you going shopping or looking after your home or garden?
   - Very much
   - A lot
   - A little
   - Not at all

4. Over the last week, how much has your skin influenced the clothes you wear?
   - Very much
   - A lot
   - A little
   - Not at all
   - Not relevant

5. Over the last week, how much has your skin affected any social or leisure activities?
   - Very much
   - A lot
   - A little
   - Not at all
   - Not relevant

6. Over the last week, how much has your skin made it difficult for you to do any sport?
   - Very much
   - A lot
   - A little
   - Not at all
   - Not relevant

7. Over the last week, has your skin prevented you from working or studying?
   - Yes
   - No
   - Not relevant

   If "No", over the last week how much has your skin been a problem at work or studying?
   - A lot
   - A little
   - Not at all

8. Over the last week, how much has your skin created problems with your partner or any of your close friends or relatives?
   - Very much
   - A lot
   - A little
   - Not at all
   - Not relevant

9. Over the last week, how much has your skin caused any sexual difficulties?
   - Very much
   - A lot
   - A little
   - Not at all
   - Not relevant

10. Over the last week, how much of a problem has the treatment for your skin been, for example, by making your home messy, or by taking up time?
    - Very much
    - A lot
    - A little
    - Not at all
    - Not relevant

Please check you have answered EVERY question. Thank you.
3. People with psoriasis are referred for assessment by dermatology specialist if indicated (poor topical treatment response, low quality of life, high severity)
NICE guidance

- **Specialist referral**
- Refer children and young people with any type of psoriasis to a specialist at presentation.
- Following assessment in a non-specialist setting, refer people for dermatology specialist advice if:
  - there is diagnostic uncertainty or
  - any type of psoriasis is severe (as defined on the static PGA) or extensive, for example more than 10% of the body surface area is affected or
  - any type of psoriasis cannot be controlled with topical therapy or
  - acute guttate psoriasis requires phototherapy or
  - nail disease has a major functional or cosmetic impact or
  - any type of psoriasis is having a major impact on a person's physical, psychological or social wellbeing.
- People with generalised pustular psoriasis or erythroderma should be referred immediately for same-day specialist assessment and treatment

in partnership with Bath & North East Somerset Council NHS
Quality statements…

4. Adults with severe psoriasis should be offered a cardiovascular risk assessment at diagnosis and at least once every 5 years
Quality Statements…

5. People with psoriasis having treatment are offered an annual assessment for psoriatic arthritis (Psoriasis Epidemiology Screening Tool)
PSORIASIS EPIDEMIOLOGY SCREENING TOOL (PEST)

HOSPITAL NO. .........................................................
PATIENT NAME ....................................................... 
DATE OF VISIT .........................................................

PEST is a validated screening tool for psoriatic arthritis (PsA) and it is recommended that patients with psoriasis who do not have a diagnosis of PsA complete an annual PEST questionnaire (NICE psoriasis guidelines 2012). A score of 3 or more indicates referral to rheumatology should be considered.

In the drawing below, please tick the joints that have caused you discomfort (i.e. stiff, swollen or painful joints).

![Joint Diagram]

Reproduced with kind permission of Professor Philip Hellwell (University of Leeds)

Please answer the questions below and score 1 point for each question answered ‘Yes’

1. Have you ever had a swollen joint (or joints)?
   - Yes
   - No

2. Has a doctor ever told you that you have arthritis?
   - Yes
   - No

3. Do your finger nails or toenails have holes or pits?
   - Yes
   - No

4. Have you had pain in your heel?
   - Yes
   - No

5. Have you had a finger or toe that was completely swollen and painful for no apparent reason?
   - Yes
   - No

Total [ ]

A total score of 3 or more out of 5 is positive and indicates a referral to rheumatology should be considered.

in partnership with Bath & North East Somerset Council NHS
Quality Statements…

6. People with psoriasis receiving systemic treatments are monitored in accordance with locally agreed protocols.
Types of psoriasis

Types
- Plaque: small < 2cm diameter, large > 2cm diameter
- Guttate
- Pustular: generalised and palmo-plantar pustulosis
- Erythrodermic

High Impact Sites
- Nails
- Scalp
- Flexures
- Genital
- Hands and feet
- Face
Plaque Psoriasis

- Accounts for 80-90% of cases
- Commonly affects trunk, buttocks, elbows, knees and scalp.
Small plaque psoriasis
Guttate Psoriasis

- Common in under 30s BUT affects less than 2% of patients with psoriasis
- Usually triggered by streptococcal throat infection
Hand and foot psoriasis

Plaque

Pustulosis
Fissured
Nail Changes in Psoriasis

Pitting (12% prevalence)

Onycholysis (14% Prevalence)
More nail changes

Subungual thickening

Oil drop
Scalp Psoriasis

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Genital Psoriasis
What causes genital psoriasis?

- may be part of a more generalised psoriasis.
- Specific factors to consider include:
  - Colonisation by bacteria and yeasts (Candida albicans)
  - Injury to the skin, causing new plaques of psoriasis to develop (Koebner phenomenon)
  - Psoriasis in the genital area may also be worsened by contact with irritants such as:
    - Urine
    - Faeces
    - Tight-fitting clothes
    - Friction associated with sexual intercourse
Flexural Psoriasis
Generalised pustular psoriasis

• Uncommon
• Severe
• Medical emergency associated with systemic upset.
Management : PCDS

Step 1: general measures

• As with other chronic skin conditions time is needed by the GP or practice nurse to discuss the condition
• Provide a patient information leaflet
• Advise on a pre-payment certificate where appropriate
PCDS guidelines …

- **Step 2: assess for related comorbidities**
- **Psoriatic arthritis**
  - Recent studies suggest that the prevalence of psoriatic arthritis in patients with psoriasis may be up to 30%
  - Patients with psoriatic arthritis should receive **prompt treatment** so as to help reduce the **long-term complications of joint destruction**
- **Cardiovascular disease (CVD)**
  - It is important that healthcare professionals working with psoriasis patients including in cardiology, dermatology and general practice, need to target modifiable risk factors and have a lower threshold for investigating patients with cardiovascular symptoms
PCDS Guidelines…

• **Step 3: emollients**
  - Prescribe copious emollients - these make the skin more comfortable and reduce the amount of scale
  - The active treatments should be used for psoriasis flare-ups until the plaques are controlled, with a treatment holiday between flare-ups when the use of regular emollients should be still be encouraged
Three step management

Step 1 - Topical¹
- First step of treatment for mild-to-moderate plaque psoriasis
- Calcipotriol + betamethasone dipropionate combination (Dovobet® Gel) is recommended first-line

Step 2 – Second line¹
- Patients with moderate-severe psoriasis at onset or patients with inadequate response to topicals
- Phototherapy or oral agents i.e., methotrexate, acitretin, ciclosporin

Step 3 – Biologics¹
- Etanercept, infliximab and adalimumab
- If 2nd-line treatments ineffective or not tolerated – as per NICE guidance

¹ Adapted from Primary Care Dermatology Society (PCDS) 2013. Available from http://www.esp.org.uk/clinical-guidance/psoriasis-treatment (Last accessed February 2014)
Aims of treatment

• To slow proliferation of skin cells
• To reduce underlying inflammation
• To reduce other symptoms eg pruritus
Treatment choice: considerations

- Presentation of disease (variants)
- Severity
- Ability of patient
- Likely treatment concordance
- Co-morbidities
- Psoriatic arthritis
### Treatment options - Topical

<table>
<thead>
<tr>
<th>Treatment type</th>
<th>Mode of action</th>
<th>Treats inflammation</th>
<th>Treats cell proliferation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emollients¹</td>
<td>Reduce dryness, scaling and cracking</td>
<td>✗</td>
<td>?</td>
</tr>
<tr>
<td>Topical corticosteroids²</td>
<td>Dampen down inflammation</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Tar preparations¹</td>
<td>Remove loose scales may act as an anti-inflammatory</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Dithranol²</td>
<td>Suppresses production of skin cells</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Vitamin D analogues²</td>
<td>Reduce excessive skin cell production</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Vitamin D + steroid combination²</td>
<td>Reduce excessive skin cell production + dampen down inflammation</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tazarotene²</td>
<td>Slows production of skin cells</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

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Vitamin D analogues

- Affect cell division and differentiation\(^1\)

- Available in a range of preparations\(^2\)
  - Tacalcitol & calcipotriol – psoriasis vulgaris
  - Calcitriol – mild to moderately severe plaque psoriasis

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**Dovobet® Gel**

- Combination therapy containing calcipotriol and betamethasone dipropionate in a Gel formulation

- Dovobet® Gel is suitable for both mild to moderate body psoriasis and scalp psoriasis

- Now also available if cutaneous foam (Enstilar)
Steroids

- Different potencies for different areas
- Suitable for: thin psoriasis
- Erythrodermic
- Palmo-plantar
- Flexural
- Sometimes tried on nails
# Topical Corticosteroids Potencies

<table>
<thead>
<tr>
<th>Mild</th>
<th>Moderate</th>
<th>Potent</th>
<th>Very potent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocortisone 0.1-2.5%</td>
<td>BetnovateRD</td>
<td>Beclometasone dicipropionate 0.025%</td>
<td>Clarelux</td>
</tr>
<tr>
<td>Dioderm</td>
<td>Eumovate</td>
<td>Betamethasone valerate 0.1%</td>
<td>Dermovate</td>
</tr>
<tr>
<td>Mildison</td>
<td>Haelan, Modrasone</td>
<td>Betacap</td>
<td>Etrivex</td>
</tr>
<tr>
<td>Synalar 1 in 10</td>
<td>Synalar 1:4 dilution Ultralanum Plain</td>
<td>Betasil</td>
<td>Nerisone Forte</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>With antimicrobials</th>
<th>With antimicrobials</th>
<th>With antimicrobials</th>
<th>With antimicrobials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canesten HC</td>
<td>Canesten HC</td>
<td>Clobetasol with neomycin and Nystatin</td>
<td></td>
</tr>
<tr>
<td>Daktacort</td>
<td>Econacort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Econacort</td>
<td>Fucidin H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nystaform-HC</td>
<td>Timodine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With urea</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Alphaderm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calmurid HC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydromol HC Intensive</td>
<td></td>
<td></td>
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<tr>
<td>With crotamiton</td>
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<td></td>
</tr>
<tr>
<td>Eurax-Hydrocortisone</td>
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</tbody>
</table>

The guiding principle when prescribing topical corticosteroids is to use the least potent strength to produce an effective result. Higher potencies should be avoided in areas where the skin is thinner e.g. face, skin folds. Applying topical corticosteroids under occlusion increases absorbency.

Also see...
- How to apply topical corticosteroids
- Fingertip Units Explained

British Dermatological Nursing Group
Coal Tar Preparations

- Exorex - 5% CCT in lotion
- Psoriderm 6% CCT, Polytar bath
- Scalp preps: Sebco, Cocos (with salicylic acid), Psoriderm scalp lotion.
- Helpful in guttate psoriasis.
Dithranol

- Very effective, but difficult to use
- Causes staining, burns good skin
- Used in day care & on ward: varying strengths
- Dithrocream for home use
Tips for High Impact Site Treatment
Ear psoriasis

• Little finger application of mild to moderate steroid preparations
• Betamethasone 0.1% ear drops, 3 drops 3-4 hourly for itch relief.
Facial psoriasis

- Mild to moderate topical steroids
- Calcitriol better tolerated than calcipotriol
- Emollient lotion
- Topical calcineurin inhibitors overnight (Elidel or Protopic ointment)
Hands and feet

- Potent or very potent topical steroid (consider diprosalic if thickened scale)
- Urea based emollient if skin on feet very hyperkeratotic.
- Greasy emollient at night
- Fissures – Duoderm extra thin (be aware of steroid occlusion)
- If weeping pustulation consider dilute potassium permanganate soaks for 15mins
Genital

• Mild – moderate corticosteroid to be applied 1-2 times daily for max 2 weeks
• Consider TCI if nil improvement after 2 weeks
• If candida intertrigo detected (satellite lesions around plaques) consider combined steroid/antifungal cream (Canestan HC or Trimovate)
Scalp preparations

- Coal tar shampoos
- Dermax: keratolytic
- Tar-based products: Sebco, Cocos (with salicylic acid); Exorex lotion; Tar pomade
- Vit D analogue: Calcipotriol scalp solution
- Vit D + steroid: Dovobet Gel
- Steroid preps: lotions, gels, mousse. Etrivex shampoo
Scalp application

- Need to be systematic; easier with help
- Daily then reduce frequency
- Leave 20-30 mins? Overnight?
- Under occlusion?
- Warn about staining
Second line treatments

- Phototherapy
- Ciclosporin
- Methotrexate
- Acetretin
- Fumarates and hydroxyurea
Phototherapy

**UVB Phototherapy**
- Patients receive TL01 narrow band UVB
- Effective treatment for psoriasis
- UVB slows skin cell production

**PUVA – psoralen plus UVA**
- UVA wavelength penetrates skin more deeply than UVB
- Used for those with a long history of psoriasis unresponsive to UVB

**Combination light therapy**
- UVB phototherapy in combination with coal tar

Non-biologic systemic treatments

• Indicated when:
  • Topical treatment not controlling psoriasis
  • Significant impact on psychological and social well being
  • Over 10% BSA affected OR localised but on high impact sites
  • OR phototherapy has been ineffective (50% recurrence at 3 months)
Support and review

- Supported patients may be more likely to adhere to treatment plan
  - At diagnosis\(^1\)
    - Reassurance that psoriasis is neither malignant nor contagious\(^2\)
    - Detailed discussion of therapeutic options\(^2\)
    - Signposting to support groups\(^2\)
  - Ongoing\(^3\)
    - Active involvement in care
    - Lifestyle advice, e.g., to reduce CV risk factors
    - Acknowledgement of daily difficulties and management of psychosocial needs
- Regular patient review is vital to ensure ongoing compliance
  - Offer patients follow-up appointment within six weeks of initiating or changing topical therapy to assess treatment efficacy\(^3\)
- Available literature suggests that a shorter duration and less frequent usage of treatments may help to maximise adherence\(^4\)

1. Aldeen T & Basra M. *British Journal of Nursing*, 2011; 20: 1186--1192
Adherence

• Non-compliance is a key challenge in psoriasis
  - Evidence shows that lack of treatment effect is as much to do with poor adherence as efficacy

• Shorter duration and less frequent usage of treatments may help to maximise adherence

• Regular patient review is vital
  - Patients should be offered a follow-up appointment within 6 weeks of initiating or changing topical therapy to assess treatment efficacy and acceptability
  - To improve adherence, treatments should be kept to a minimum

Extra educational resources

Additional resources for psoriasis patients:

• The Psoriasis Association
  http://www.psoriasis-association.org.uk/

• The Psoriasis and Psoriatic Arthritis Alliance (PAPAA)
  http://www.papaa.org

• Psoriasis Scotland Arthritis Link Volunteers
  http://www.psoriasisscotland.org.uk/
References

• NICE Guideline 153: Psoriasis
• [www.pcds.org](http://www.pcds.org)
Any Questions?