Assessment and Management of Psoriasis in Primary Care

Medscape Primary Care Hacks

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Most Common Presentations

Presentation	Appearance	Notes
Chronic Plaque Psoriasis[1–4]	Symmetrically distributed, sharply demarcated plaques with overlying scale, predominantly on the extensor surfaces (elbows and knees), trunk, flexures, sacrum, scalp, natal cleft, umbilicus, and behind the ears **On lighter skin tones, plaques are erythematous and scale is typically silvery white**	• Present in 80–90% of people with psoriasis
Scalp Psoriasis[A][2,5]	Scaly, well demarcated patches or plaques affecting all or part of the scalp	• May extend beyond the hairline onto the neck or face
Flexural (Inverse) and Genital Psoriasis[3,6,7]	Smooth, shiny, well defined patches localised to the skin folds and/or genitals Because flexural/genital psoriasis lacks the scale typical of chronic plaque psoriasis, it is often misdiagnosed as a fungal infection	• **Avoid confusing flexural/genital psoriasis with candidal intertrigo**; however, affected areas are prone to secondary fungal infection, particularly *Candida albicans* • Sex may be embarrassing or uncomfortable, because of the areas affected
Facial Psoriasis[A][8,9]	Often appears as thickened, erythematous areas with/without scale The patches may feel sensitive, painful, and/or itchy	• Facial psoriasis may be difficult to diagnose but rarely exists in the absence of psoriasis elsewhere
Nail Psoriasis[3,10–12]	Pitting, onycholysis, onychorrhexis (longitudinal ridging), yellowing, subungual hyperkeratosis (an excessive build up of keratin under the nail bed), and the oil drop sign are all features The oil drop sign (also referred to as a salmon patch) is a yellow-red, translucent discolouration in the nail bed that resembles a drop of oil beneath the nail plate	• Onychomycosis (fungal nail infections) may coexist with psoriatic nail dystrophy, due to changes in the nail plate and immunosuppressive therapies • **Nail involvement strongly correlates with PsA**
Guttate Psoriasis[3,13]	Appears as a 'shower of raindrops', taking the form of small, scaly plaques (<1 cm) over widespread areas of the body Typically presents 1–2 weeks after a streptococcal throat infection	• Guttate psoriasis usually clears within 3–4 months, but **12.5% of impacted individuals go on to develop chronic plaque psoriasis**
Palmoplantar Pustular Psoriasis[3,14]	Palmoplantar pustulosis is a chronic pustular condition affecting the palms and soles	• Palmoplantar pustular psoriasis is strongly associated with smoking and is more common in women than men • **Around 25% of individuals with this subtype also have chronic plaque psoriasis**

[A] **Sebopsoriasis** is a variant form of facial and scalp psoriasis that affects the areas typical of seborrhoeic dermatitis (eyelids, nasolabial folds, eyebrows, beard area, and scalp).[8,9]

Psoriasis in Skin of Colour

- **In melanin-rich skin tones, plaques may be violaceous or dark brown, and scale may be thicker and appear grey**[2,15,16]
- People with skin of colour are more prone to postinflammatory hyper- or hypopigmentation[2]
- People with Afro–Caribbean hair texture can find the treatment of scalp psoriasis particularly challenging[15,16]
- Read more about the diagnosis and management of psoriasis in skin of colour.

Assessment

General Principles

- Family history is a valuable clue—**40% of patients with psoriasis have a family member affected by the condition**[1]
- **When assessing psoriasis, record its location and its extent as a percentage of BSA**[2,17,18] (an individual's palm is ~1% of BSA)
- **Psoriasis is an HIV indicator condition**—screen for HIV if an individual presents with atypical psoriasis, recalcitrant psoriasis (failure to respond to treatment), or severe, new-onset psoriasis[1,19]
- **Lifestyle choices may exacerbate psoriasis**; support people living with psoriasis to modify these choices, when possible (see *Life Story and Lifestyle Choices*).

Drugs That Exacerbate Psoriasis

Medications that can worsen psoriasis include:[1,20]

- lithium
- beta-blockers
- terbinafine
- antimalarials, such as hydroxychloroquine
- NSAIDs
- ACEis.

Psoriatic Arthritis

- **Up to one-third of people living with psoriasis develop PsA**[12]
- PsA has a strong correlation with nail involvement[12]
- **Screen people living with psoriasis for PsA annually using the PEST score**, as early referral to Rheumatology and specialist intervention can reduce joint damage.[1,12,18]

Cardiometabolic Risk Assessment

- The risk of cardiometabolic disease is greater in people living with psoriasis, especially those with severe psoriasis or PsA[1,21]
- **Everyone living with psoriasis should have a full cardiometabolic risk assessment at presentation**;[1,18,22,23] ideally, this would include BMI, WtHR, BP, full lipid profile, HbA_{1c}, and FIB-4
  - see also the Primary Care Hacks on CVD prevention and MASLD/MASH and the CVRM checklist
- Consider repeating this assessment annually
  - although NICE and SIGN recommend repeating this assessment every 5 years,[18,22] more frequent assessment would be preferable if possible
- Consider prioritising frequent cardiometabolic risk assessment:[18]
  - if psoriasis is severe
  - consistent with age, or
  - in the presence of other cardiometabolic risk factors
- Psoriasis is also an **independent risk factor for thromboembolic disease**[18,24]
  - counsel individuals on this risk and offer advice on minimising it (for example, during hospital admission, surgery, or periods of immobility).[18]

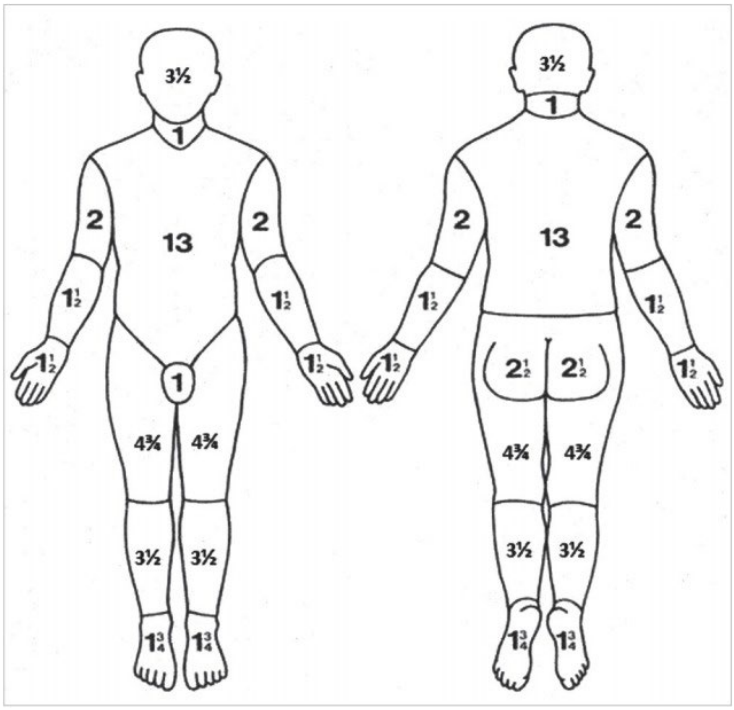
Impact on Mental Health

- **Psoriasis can have a profound impact on mental health**—including anxiety, depression, suicidal ideation, and substance abuse[25]—**but this impact is underappreciated**
- Give individuals the opportunity to discuss the impact of psoriasis on their mental health[17,18,26]
  - the DLQI is a validated scoring system that can be used to aid assessment[18,26]
  - direct individuals to appropriate sources of help.[18,26]

See the table overleaf for a comprehensive overview of psoriasis treatment options that can be prescribed in primary care

Life Story and Lifestyle Choices

Lifestyle Factor	Effect on Psoriasis	Suggested Modification
Stress[1,18,26,27]	Stress has a strong association with psoriasis.	Support management of stress, anxiety, and depression, as appropriate.
Alcohol[1,2,18]	People with psoriasis are more likely to engage in heavy drinking. Excessive alcohol use may worsen psoriasis and reduce concordance with treatment.	Advise drinking alcohol within recommended limits.
Smoking[1,2,18]	Smoking increases the risk of chronic plaque psoriasis and palmoplantar pustulosis.	Support smoking cessation.
Trauma[1,3,27]	Psoriasis exhibits the Koebner phenomenon (new lesions form in sites of damaged or irritated skin).	Recommend avoiding unnecessary surgery and tattoos, wearing loose-fitting clothes, and avoiding accessories that may rub.
Obesity[2,26,28]	There is a correlation between BMI and increasing prevalence/ severity of psoriasis.	Individuals should be encouraged to maintain a healthy BMI/WtHR.
Sunlight[1,2,29]	Sunlight usually improves psoriasis, but some individuals may find their skin is worsened by UV light.	Gradual exposure to sunlight, taking care to avoid sunburn, may be beneficial. Sunbeds should always be avoided, as they increase cancer risk and accelerate ageing.
Pregnancy[1]	Psoriasis tends to improve during pregnancy, but often flares postpartum.	—



Lund and Browder Chart—for BSA[30]

Murari A, Singh K. Lund and Browder chart—modified versus original: a comparative study. *Acute Crit Care* 2019; **34** (4): 276–281. doi.org/10.4266/acc.2019.00647

Annual Checklist

- ☐ **BSA (%)**[2,17,18]
- ☐ **Areas affected**[18,26]
  - ask specifically about genital involvement, as people may not volunteer this information[7]
- ☐ **Medication review**[18,22]
  - review the efficacy of ongoing psoriasis therapies
  - review medications that may exacerbate psoriasis (see *Drugs That Exacerbate Psoriasis*); use alternatives if possible
- ☐ **Concordance with therapy**[17,22,26]
  - discuss concordance with psoriasis therapy
  - emphasise the importance of regular copious emollients and soap substitutes
- ☐ **PsA screening**[17,18]—use the PEST questionnaire
- ☐ **Mental health and impact on QoL**—use the DLQI[18,22,26]
- ☐ **Cardiometabolic risk screening** (see *Cardiometabolic Risk Assessment*); consider the following:
  - BMI and WtHR
  - BP
  - lipid profile
  - HbA_{1c}
  - FIB-4
  - smoking status
- ☐ Consider **other conditions associated with psoriasis** (such as obesity, IBD, coeliac disease)[17]
- ☐ Discuss **lifestyle choices**.[1,2]

Referral to Secondary Care

- **Immediate same-day referral**—generalised pustular psoriasis or erythrodermic psoriasis[18]
  - generalised pustular psoriasis features pus-filled, sterile blisters on inflamed skin[31]
  - erythrodermic psoriasis features is characterised by widespread redness, scaling, and peeling affecting most of the body[32]
  - both of these conditions are medical emergencies that can lead to serious systemic complications (such as infections, fluid imbalance, or heart failure)[31,32]
  - both of these conditions can be triggered by certain skin infections or the sudden withdrawal of systemic steroids[31,32]
- **Urgent referral to Rheumatology**—suspicion of PsA (PEST score ≥3)[18]
- **Routine referral to Dermatology**:[18]
  - severe/extensive psoriasis (for example, >10% BSA)
  - failure to respond to topical treatment
  - significant impact on psychological, social, or physical QoL
  - children presenting with psoriasis
- NICE also recommends referring the following to Dermatology, but it is unrealistic to expect that these patients will be seen by the NHS in a timely manner:[18]
  - acute guttate psoriasis (for narrowband UV therapy)
  - severe nail disease
  - diagnostic uncertainty.

Emollients

- **Emollients are the foundation of treatment**,[1,18,26] but they are underprescribed and underutilised
- Prescribe copious quantities of emollients and **advise the individual with psoriasis to use them liberally and frequently** (preferably, using ~250–500 g/week)[1,26]
- People living with psoriasis should avoid soaps and use a soap substitute instead, such as an emollient ointment dissolved in hot water.[17]

Combination Therapy

- **OD combination therapy should be the standard of care for chronic plaque psoriasis**
- Topical therapy is the first-line treatment for psoriasis,[1,17,18,26] and OD topical combination products containing **calcipotriol monohydrate** (a vitamin D analogue) and **betamethasone dipropionate** (a moderately potent corticosteroid) improve concordance and clinical effectiveness[1,33]
  - calcipotriol and betamethasone have greater anti-inflammatory and antiproliferative effects in combination than either component has alone[33]
  - note: although this is a standard first-line option used by clinicians, it differs from NICE's recommendations[1,18]
- Combined calcipotriol/betamethasone is available as a cream, foam, gel, or ointment[1,33]
  - no more than 60 g should be used in a 4-day period (maximum dose: 15 g/day)[34]
- Note: **one fingertip unit of cream, gel, or ointment is enough to cover two palm-sized areas of skin**.[35]

Therapeutic Options for Psoriasis in Primary Care

- **Prescribe emollients on repeat, to be used liberally and frequently (recommended usage: ~250–500 g/week)**[1,26]
- **Prescribe a soap substitute, e.g. an emollient ointment**[17]

Therapeutic Option(s)		Prescribing Notes
Chronic Plaque Psoriasis of the Trunk and Limbs		
First-line therapy[1,26]	OD fixed combination of calcipotriol + betamethasone[A]	• Apply to the affected area OD until plaques flatten, or for ≤8 weeks • Discontinue when skin is smooth, even if it is still erythematous
For thick scale[B][1,26,36]	A salicylic acid formulation, possibly in combination with a steroid (e.g. Diprosalic® ointment [betamethasone dipropionate, salicylic acid])	• Apply OD or BD to thick scaly plaques • Use for 1–2 weeks
Maintenance therapy[26]	Copious use of emollients **with/without** a twice-weekly fixed combination of calcipotriol + betamethasone[A],[C]	—
Alternative therapies (e.g. for small plaque psoriasis of the legs)[1,18,26]	Coal tar solutions,[D] e.g. Exorex® lotion (coal tar solution), Psoriderm® cream (coal tar, distilled)	• Apply a thin layer to affected areas OD or BD; massage gently and leave to dry
	Vitamin D analogue monotherapy (e.g. Silkis® [calcitriol], calcipotriol)	• Apply a thin layer to affected areas OD or BD
Scalp Psoriasis		
When managing scalp psoriasis, agree a management plan with the individual that considers hair type, texture, and haircare practices, including frequency of washing[5,16]		
First-line active treatment[26,37]	OD fixed combination of calcipotriol + betamethasone[A]	• Apply to the scalp before bed; leave on overnight and wash out in the morning • May be used every night for ≤4 weeks
Alternative active treatments[26,37,38,39]	Betacap® scalp application (betamethasone valerate)	• Apply to affected areas of the scalp when dry; leave on overnight and wash out in the morning
	Diprosalic® scalp application	• Apply a few drops to scalp OD or BD and massage into affected areas • Review treatment after ≤2 weeks
	Etrivex® shampoo (clobetasol propionate)	• Massage into scalp and wash out after 20 minutes • May be used OD for ≤4 weeks
For Afro–Caribbean textured hair[16]	Once-weekly treatment with a medicated shampoo (e.g. Capasal® [salicylic acid, coconut oil, coal tar, distilled], Dercos DS® [selenium disulphide, salicylic acid], Exorex®, or T/Gel® [coal tar extract]) **in combination with** OD or BD steroid application in a formulation acceptable to the individual's haircare practice (often an oil)	
For thick scale[B][1,26,37]	A fixed combination of coal tar solution + salicylic acid + sulphur (e.g. Cocois® or Sebco® ointment)[D]	• Massage into the scalp and leave overnight • Wear a shower cap or use an old pillowslip • Wash out with Alphosyl® shampoo (alcoholic coal tar extract) or Capasal® shampoo[D] • Use for ≤7 days until scale has thinned
For mild scale[26]	Coconut oil	• Gently massage into scale and leave on overnight
Maintenance therapy[26,37]	Twice-weekly fixed combination of calcipotriol + betamethasone[A],[C]	• Apply to the scalp before bed; leave on overnight and wash out in the morning
Alternative maintenance therapies[26,37,38,40]	Once- or twice-weekly coal-tar-based shampoo (e.g. Alphosyl®, Capasal®, Polytar® [coal tar solution], Psoriderm®)[D]	• Massage into the scalp; leave for 5 minutes before washing out
	Once- or twice-weekly Synalar® gel (fluocinolone acetonide)	• Apply a few drops to scalp and massage into affected areas
	Once- or twice-weekly Diprosalic® scalp application	• Apply a few drops to scalp and massage into affected areas
	Dermax® shampoo (benzalkonium chloride) is an alternative maintenance therapy for those who do not like the smell of tar	
Hair margins[37]	Hydrocortisone 1%	• Apply BD to skin around the hair margin
	Eumovate® (clobetasone butyrate)	
Flexural and Genital Psoriasis		
First-line therapy[1,7,18,26]	A topical, mild-to-moderate-potency steroid (e.g. Eumovate® or hydrocortisone)[E] **and** a topical vitamin D analogue (e.g. calcipotriol, Curatoderm® [tacalcitol monohydrate], Silkis®)	• Apply topical steroid OD or BD for ≤2 weeks then reduce dose to twice weekly once the flare is controlled; discontinue as soon as possible to avoid complications (e.g. skin thinning, striae) • Apply vitamin D analogue OD, at a different time of day to the steroid

Table based on authors' clinical experience and interpretation of relevant guidance and summaries of product characteristics. Some medications in this table are recommended off licence, and clinicians are advised to review local licensed indications before prescribing any therapeutic. As always, take an individualised and holistic approach to the care of people living with psoriasis.

Therapeutic Options for Psoriasis in Primary Care (Continued)

Therapeutic Option(s)		Prescribing Notes
Flexural and Genital Psoriasis (Continued)		
Second-line therapy[7,18,26]	A topical calcineurin inhibitor (tacrolimus or pimecrolimus)	• Do not use in uncircumcised male patients
Antifungal therapy[6,7]	Consider adding antifungal therapy (e.g. clotrimazole 1% TDS) for secondary fungal infection. A combination therapy (e.g. Trimovate® [clobetasone butyrate, nystatin, oxytetracycline calcium]) may be worth considering	
Facial Psoriasis		
First-line therapies[9,18,26,41]	Hydrocortisone 1%	• For the face • Apply OD or BD for ≤2 weeks
	Eumovate®	• Safe to use around the hairline • Apply OD or BD initially, then reduce frequency of application and/or change to a less potent preparation as improvement occurs
Second-line/ maintenance therapies[9,18,26]	Tacrolimus 0.1%	• Apply OD or BD • The PCDS notes that tacrolimus is the most effective treatment for facial psoriasis
	Silkis® ointment	• May be irritant, so introduce gradually
Guttate Psoriasis		
Ideal first-line therapy[26]	Referral to secondary care for phototherapy	
Treatment options (while awaiting secondary care)[18,26]	Exorex® lotion[D]	• Apply BD or TDS
	OD fixed combination of calcipotriol + betamethasone[A]	• Apply OD for ≤8 weeks
Alternative treatment options[26,36,41]	Diprosalic® ointment	• Apply OD or BD
	Eumovate®	• Apply OD or BD for ≤4 weeks
For **recurrent guttate psoriasis with proven association with streptococcal sore throat**, consider early antibiotics and/or referral for tonsillectomy[26]		
Nail Psoriasis		
Practical management[10,26,42]	• Keep nails short • Nail varnish may be applied, but avoid false nails • Exclude fungal infection, which may coexist with psoriatic nail changes • Note: terbinafine exacerbates psoriasis	
Whole-person perspective[1,10,12,18]	Make sure to screen for PsA (using PEST), as arthropathy is more likely to develop in individuals with nail changes	
Active treatment (note: nail psoriasis is generally refractory to treatment)[22,26,42]	Super potent topical steroid applications may be dripped on the inside of the affected nail(s)	
	OD fixed combination of calcipotriol + betamethasone[A],[C]	• Massage into the nail and as far under it as possible
Palmoplantar Pustular Psoriasis		
Practical management[18,26]	• Strongly advise smoking cessation • Consider referral for PUVA/acitretin treatment	
First-line therapy[14,26,43,44]	OD potent topical steroid (e.g. Dermovate® [clobetasol propionate], Betnovate® [betamethasone valerate])	• Apply at night under occlusion (e.g. by wrapping hands/feet in cling film) • Reduce frequency of application as improvement occurs, and discontinue as soon as possible; use for ≤4 weeks

[A] Examples of fixed combinations of calcipotriol monohydrate + betamethasone dipropionate (50 mcg/g + 0.5 mg/g) include Dovobet® gel, Dovobet® ointment, Enstilar® foam, and Wynzora® cream. Do not exceed 15 g/day[34]

[B] Thick scale can act as a barrier preventing absorption of active treatment.[1] Therefore, a descaling agent may be necessary before commencing active treatment[1]

[C] When using calcipotriol + betamethasone for ≥8 weeks, treatment should be continued only after medical review and under regular supervision from a medical professional

[D] Coal-tar-based preparations may be preferable for large, thin plaques, especially when scale is present, but tolerability is often low (because it has a strong smell, is messy to apply, and can stain skin and clothes)[17,37]

[E] Because of the thin skin in areas affected by flexural/genital psoriasis, steroids stronger than Eumovate® (e.g. betamethasone dipropionate) are not recommended.[1,7]

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Useful Patient Resources

- The Psoriasis Association website
- PCDS PIL on psoriasis
- BAD PIL on psoriasis—an overview
- EADV PILs, including a PIL on psoriasis in pregnancy.

ACEi=angiotensin-converting enzyme inhibitor; **BAD**=British Association of Dermatologists; **BD**=twice daily; **BMI**=body mass index; **BP**=blood pressure; **BSA**=body surface area; **CVD**=cardiovascular disease; **CVRM**=cardiovascular–renal–metabolic; **DLQI**=Dermatology Life Quality Index; **DS**=disulphide; **EADV**=European Academy of Dermatology and Venereology; **FIB-4**=Fibrosis-4; **GPwER**=GP with Extended Role; **HbA_{1c}**=glycated haemoglobin; **IBD**=inflammatory bowel disease; **MASH**=metabolic dysfunction-associated steatohepatitis; **MASLD**=metabolic dysfunction-associated steatotic liver disease; **NSAID**=nonsteroidal anti-inflammatory drug; **OD**=once daily; **PCDS**=Primary Care Dermatology Society; **PEST**=Psoriasis Epidemiology Screening Tool; **PIL**=patient information leaflet; **PsA**=psoriatic arthritis; **PUVA**=psoralen and ultraviolet A; **QoL**=quality of life; **SIGN**=Scottish Intercollegiate Guidelines Network; **TDS**=three times daily; **UV**=ultraviolet; **WtHR**=waist-to-height ratio