Psoriasis

Key facts:

- A chronic, relapsing, inflammatory condition, affecting the skin, nails, flexures, and joints with cardiovascular and psychological co-morbidities. It is influenced by genetic and environmental factors.
- May develop at any age, most frequently presents in young adults or age 50-70y
- **Psoriasis can be well controlled**. Treatment aims are to minimise skin manifestations, co-morbidities and improve quality of life
- Prevalence of **psoriatic arthritis** in patients with psoriasis may be up to 30% (strongly linked to nail disease). **Early intervention** can reduce joint damage

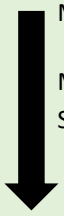
Diagnosis - clinical

- Plaque psoriasis are the most common lesions (80-90%) - sharply demarcated plaques which are slightly elevated and covered in silvery scales. If scales are gently scraped they turn silvery white and you may see tiny capillary bleeding points (Auspitz sign). Elbows, knees, legs, lower back, scalp and glans penis are most commonly affected.
- Easy to misdiagnose in early stages. Consider if recurrent presentations with skin complaints.

Clinical assessment (holistic approach)

- Symptoms? Pain, itch, swollen/painful joints, heel pain
- What treatments are being and have been used, how long for, what helped and what did not
- Check for **possible triggers**: stress, alcohol, smoking, obesity, sunlight (usually beneficial but a minority worsened by sunlight), infections esp. streptococcal
- PMH – especially ask about CV disease, liver disease, HIV status
- **Drug history** – hydroxychloroquine, beta-blockers, ACEi, lithium can aggravate psoriasis
- Check for **pregnancy and contraception** in women of child-bearing age
- **Quality of life, mood** "how are you coping"
- Expectations and specific questions
- **Examine:** Pattern of lesions and amount of surface area affected
  Special sites – scalp and nail involvement, specifically ask about genital areas
  Joints – be alert to signs of inflammatory arthritis including tenosynovitis and heel pain
- **Assess CV risk** – at initial presentation & then at least 5 yearly: FH, BMI, BP, creatinine, urine protein, HbA1c
- If atypical or severe psoriasis or unresponsive to treatment, **check HIV status**

Severity of psoriasis



Mild: Few, flat, mildly inflamed lesions, not much scale, not causing symptoms, minor impact on life

Moderate:

Severe: Thick, red, inflamed lesions
>10% of body surface area is plaque
Significant areas affected (face, palms, soles, flexures, genitals)
Severe impact on quality of life

Management

Aiming to minimise skin manifestations, co-morbidities and to improve QoL

1. Lifestyle-directed advice – info about disease and treatment; discuss triggers and lifestyle change (obesity, smoking, alcohol, stress). Refer as necessary (nutrition, psychologist). Natural sunlight exposure can improve psoriasis in some, 'sunbathing' 20-30 minutes/day, care not to get burned.
   Online information and support groups (https://psoriasiskenya.co.ke)
2. Emollients – use at least BD and continue even between flare-ups – see p2
3. Active topical treatment (usually corticosteroid) during flares and less frequently during remission. Depends on site & type of psoriasis – see p2,3
4. DMARDs (methotrexate) if psoriatic arthritis, v. severe disease or failed topical treatment – see DMARD guideline, discuss with consultant
5. Manage CV risk factors
6. Follow up in 4w, or sooner if psychological distress

Discussion with consultant:

- Systemically unwell
- Severe or widespread psoriasis
- Psychological distress
- Poor response to standard treatments
- Considering use of methotrexate
- Psoriatic arthritis
- Diagnostic uncertainty
- Steroid atrophy or concerns regarding the amount of topical steroids being used
- Involvement of sites which are difficult to treat e.g. face, palms, soles, genitalia, if unresponsive to initial therapy

Emollients (unfragranced, uncoloured)

- Reduce itch, cracking, soreness and remove scale. They also may allow the active treatment to be better absorbed
- Will need large quanities (250-500g/week) – **patient choice is essential**
- Apply in **single strokes, in direction of hair growth.** Apply twice daily or more, especially after bathing/showering.
- **Types of emollient:**
  - Specific emollients bought from a pharmacy e.g. Epimax, Aveeno, cetaphil, zerobase, epimol cream BUT expensive!
  - Emulsifying ointment available from KH pharmacy
  - Petroleum jelly (or glycerine mixed with petroleum jelly 1:2) is an affordable option
  - Other cheaper alternatives to try are: sunflower oil, coconut oil, cooking vegetable fat (refined palm oil) e.g. Kimbo.
  - Aqueous cream should not be used
- Ointments in tubs can become cross infected so advise to use a spoon rather than hands to scoop out the ointment
- **Wait at least 20m** for emollient to soak in before applying the active treatmet
- **Bathing/showers:** no need for specific products. Use usual emollient or an oil as a soap. Pat dry (do not rub) after showering/bathing – then apply emollient

Active treatments for different types and sites of psoriasis		
Chronic plaque psoriasis on truck & limbs	Well-defined, symmetrical, dull red, small and large scaly plaques Predominantly extensor surfaces but can be generalised Differential diagnosis: eczema, tinea, lichen planus, SLE	Potent topical steroid (betamethasone) used OD Can use under dressing or plastic foodwrap to increase potency. If available: use steroid with vitamin D analogue (calcipotriol). **If very thick scale** (this can act as a barrier to the topical steroid working) use Whitfield's ointment (contains salicyclic acid, or other salicyclic creams) OD or BD to descale, OR emulsifying ointment and plastic foodwrap overnight. During remission, improvement should be sustained with emollients and using active topical treatment twice weekly
Scalp psoriasis	Very common, easier felt than seen, can be patchy, socially embarrassing, typically extends just beyond the hairline, best seen on nape of neck Differential diagnosis: seborrheic dermatitis (flakes are thinner and greasier; look for psoriasis elsewhere to help distinguish	1. If thick scaly plaques – first soften and remove scale with coconut oil massaged into scalp and left overnight. Wash out with water (or coal tar shampoo e.g. Alphosyl, if affordable). Continue until scale is much thinner. 2. If ongoing inflammatory plaques - use potent topical steroid (betamethasone) once daily for 4w. (Can prescribe Betnovate scalp application.) If ineffective, use with calcipotriol or prescribe very potent topical steroid (clobetasol = dermovate) for 2w. 3. Maintenance therapy – Once or twice weekly coconut oil (or coal tar shampoo if affordable) with once or twice weekly betamethasone ointment. Step up frequency if flare.
Psoriatic arthritis	Inflammatory polyarthritis, spondylarthritis, synovitis, dactylitis and tendonitis	Under-recognised Important to diagnose and treat early If suspect or in doubt, **discuss with consultant** Treat with methotrexate – see DMARD guideline
Psoriasis on flexures (*inverse* psoriasis) **and genitalia**	Shiny red patches, lack scale Flexures - groin, navel, axillae, submammary region Diff diagnosis: candidiasis (not usually in young/middle-aged), fungal infection (usually heals from centre and edges raised), seborrheic dermatitis – look for psoriasis elsewhere to help distinguish	1. Mild topical steroid (hydrocortisone 1%) or moderate topical steroid (e.g. clobetasone - Eumovate) OD for max of 2w 2. Once plaque is under control, use the steroid twice weekly to keep under control 3. Can step up frequency of steroid treatment if a flare, but should not more often than once a month Avoid potent steroids (betamethasone) on these areas (Topical vitamin D analogues e.g. calcitriol can be used with top. steroid if available & affordable – use at opposite end of day)

Psoriasis on the face	Uncommon but distressing – sometimes with plaques but often looks similar to seborrhoeic dermatitis	Use moderate potency topical steroid (e.g. clobetasone – Eumovate) for one week then reduce to twice weekly if necessary for maintenance (or if available, switch to tacrolimus = protopic 0.1% ointment OD or BD to reduce with response) Use topical steroid with topical antifungal if very like seborrheic dermatitis
Psoriasis of nails	Pitting, hyperkeratosis, onycholysis (separation of nail from nailbed) About 50% of patients	Look for arthritis! Check for co-existing fungal infection Practical tips – keep nails short, can use nail buffers, nail varnish and gel safe Can try to get potent steroid cream under onycholytic nails (can prescribe betnovate scalp application as more liquid)
Guttate psoriasis	Rapid onset (1-7d) of multiple small 'raindrop like' plaques of psoriasis, mostly over torso and limbs. Usually following streptococcal infection. May lack scale initially. Differential diagnosis: **secondary syphilis,** pityriasis rosea, viral rashes, drug eruptions	Mild cases clear spontaneously with the help of emollients. If widespread or unresponsive, phototherapy can be useful Can try topical betamethasone (+/-calcipitriol) if phototherapy not an option
Pustular psoriasis *palmoplantar or generalised*	Palmoplantar - creamy sterile pustules mature into brown macules; very difficult to treat. Check for syphilis Generalised: multiple, sterile, non-follicular pustules within plaques of psoriasis or on red, tender skin. Rare, may occur with fever, patient often very unwell	**Discuss with consultant** More likely in smokers – advise stop smoking Very potent steroid (clobetasol) at night under plastic foodwrap Emollient through the day **Medical emergency**
Erythrodermic psoriasis	Psoriasis is one cause of erythroderma (redness over >90% body); can progress to infection & systemic compromise	**Medical emergency**

Other possible therapies - depending on availability and finances

- **Phototherapy** - often useful in psoriasis and is available in Nairobi (discuss with consultant)
- Vitamin D analogues – calcipotriol and calcitriol work well in combination with topical steroids during flares then as single agent for maintenance (calcitriol less irritant than calcipotriol so good for flexures and genitalia)
- Coal tar preparations – cheap, can use on extensor surfaces and scalp, effective but messy so patient may not like
- Dithranol
- Tacrolimus (Protopic 0.1%)
- Urea creams, salicylic acid creams – can be useful to break down scales and thick skin

Topical steroid potency

Mild	Moderate (2x stronger)	Potent (10x stronger)	Very potent (50x stronger)
*Hydrocortisone ACETATE 1%	Betamethasone 0.025% (in **extraderm* cream) Alcometasone Clobet**asone** (Eumovate)	*Betamethasone 0.1% Hydrocortisone BUTYRATE 0.1% Fluticasone Mometasone	Clobet**asol** 0.05% (Dermovate)

* available at AIC Kijabe Hospital pharmacy

References: https://www.pcds.org.uk/clinical-guidance/psoriasis-an-overview; Working Group of the Dermatological Society of South Africa. Guideline on the management of psoriasis in South Africa. S Afr Med J. 2010 Apr;100(4 Pt 2):257-82. PMID: 20666218; https://www.redwhale.co.uk/content/psoriasis accessed 28/9/24