Presentation and management of psoriasis

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Intended learning outcomes:

- By the end of the session students will be able to:
  - Classify psoriasis in line with treatment guidelines
  - Identify appropriate treatments for severity and presentation
  - Be aware of indications to refer appropriately

Quiz

- What is the approximate UK incidence of psoriasis?
- List 3 potential triggers of psoriasis
- List 3 potential co-morbidities of psoriasis
- How much commoner is depression in adults with a chronic physical health condition than adults without one?

Incidence of psoriasis

- The Psoriasis Association (n.d.) estimates that psoriasis affects between 1% and 3% of the UK population - up to 1.8 million people.
- Schofield et al (2011) found there were 448 episodes per 10,000 of people consulting their GP for psoriasis.
- Schofield et al (2011) also cite patients with psoriasis make up between 5% and 11% of patients attending specialist (secondary care) dermatology services.

Clinical features

- Thickened epidermis
- Absence of granular layer
- Retention of nuclei in stratum corneum (parakeratosis)
- Accumulations of polymorphs in stratum corneum (micro-abcesses)
- Dilated capillaries in upper dermis
- Psoriasis is a systemic condition

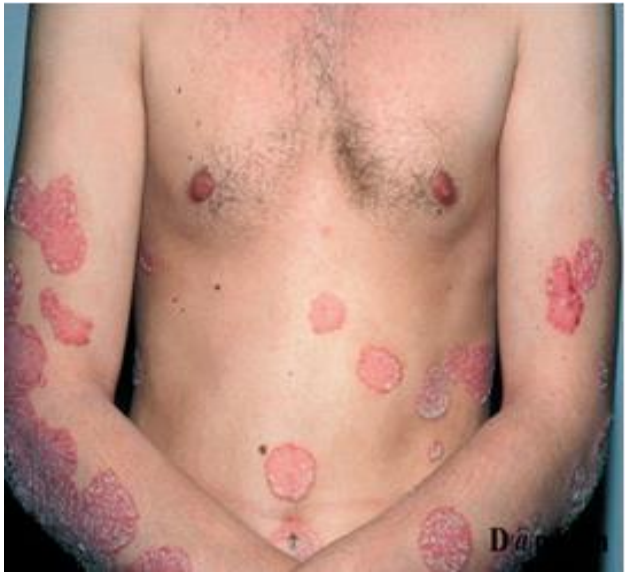
Overview of pathophysiology

- Psoriatic pathogenesis is driven by a complex interaction between environmental and genetic factors
- In susceptible individuals, triggering events lead to activation of dendritic cells and generation of specific effector T cell populations that migrate into the skin tissue
- Cross-talk between epithelial cells and immune cells shapes and maintains the inflammatory milieu
- Increased understanding of these interactions underpins the development of new therapeutic approaches

Nestle FO, et al. N Engl J Med. 2009;361:496-509;

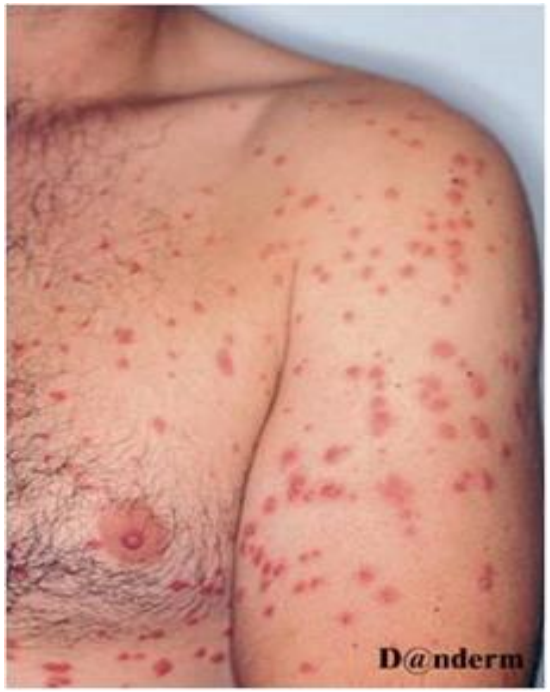
Presentations

- Classic plaque – often on extensor surfaces

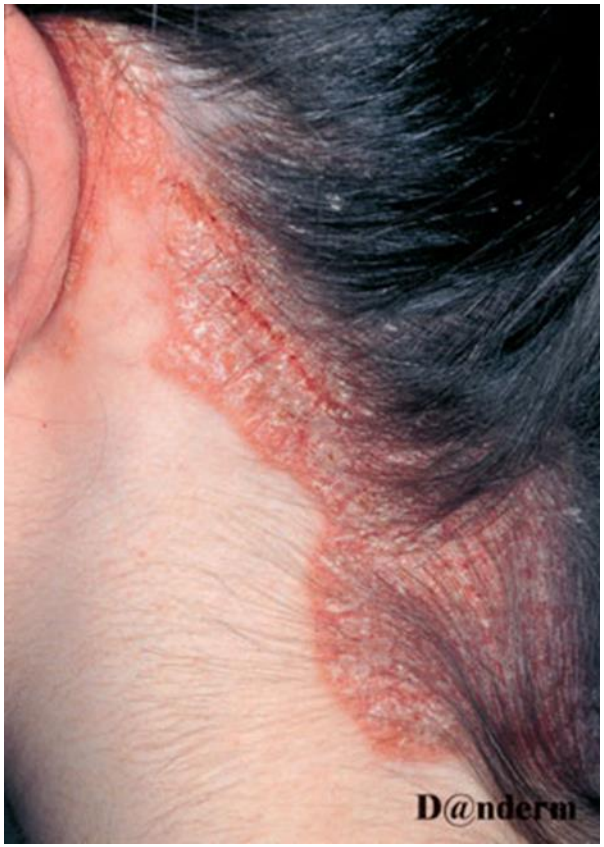


Presentations

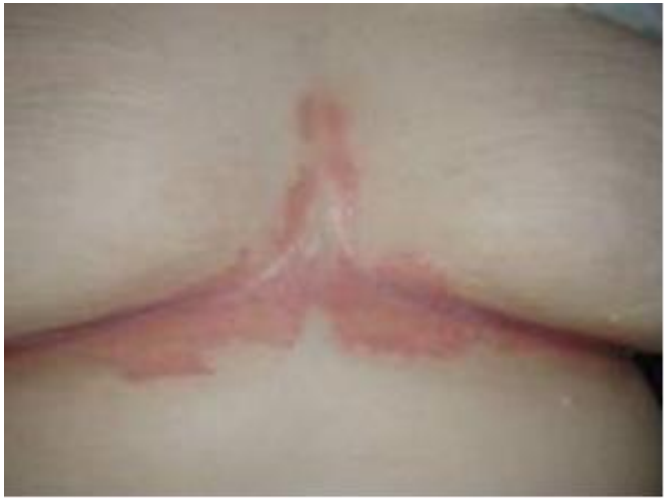
- Guttate



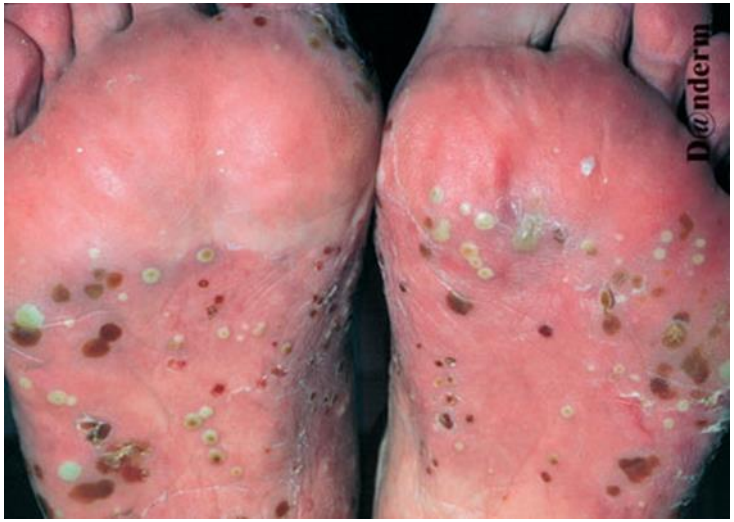
Scalp psoriasis



Inverse (flexural) psoriasis

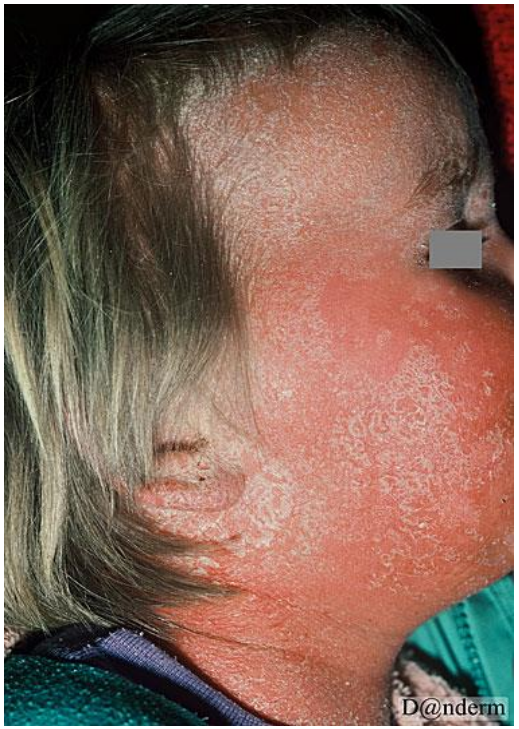


Palmoplantar pustulosis



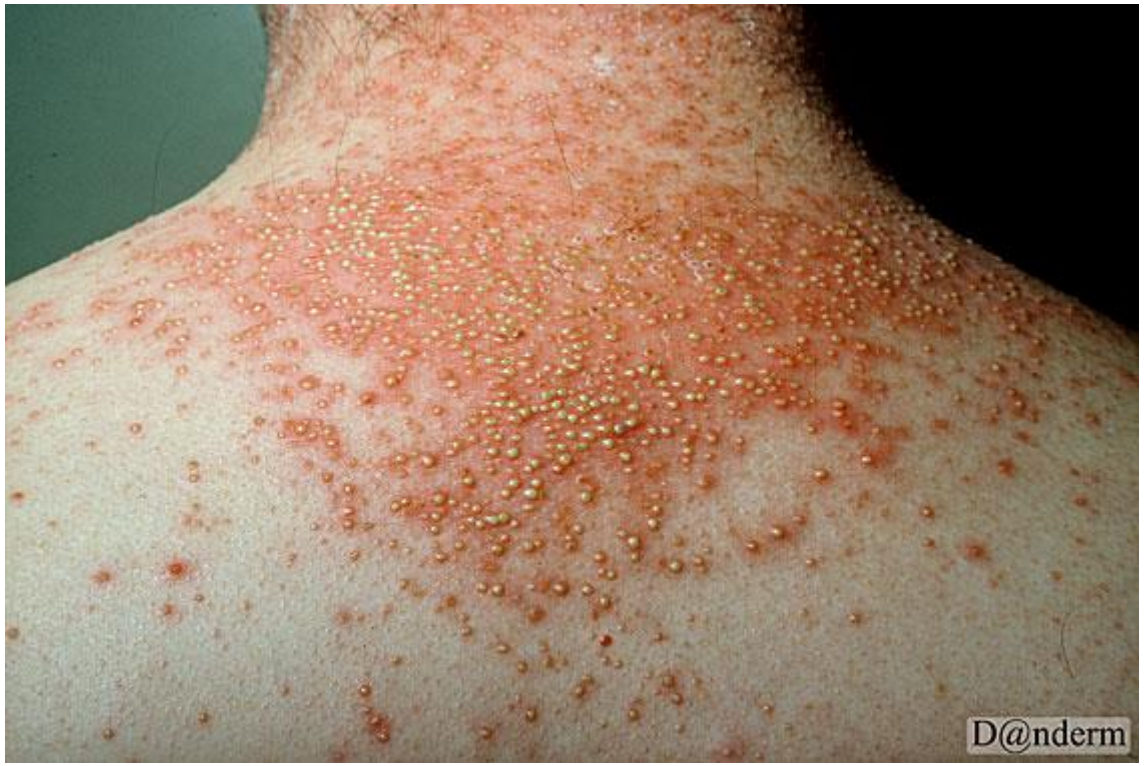
Erythrodermic psoriasis

- Develops slowly via unstable plaque psoriasis or very rapidly occasionally as a new presentation
- Red flag condition



Pustular psoriasis 1

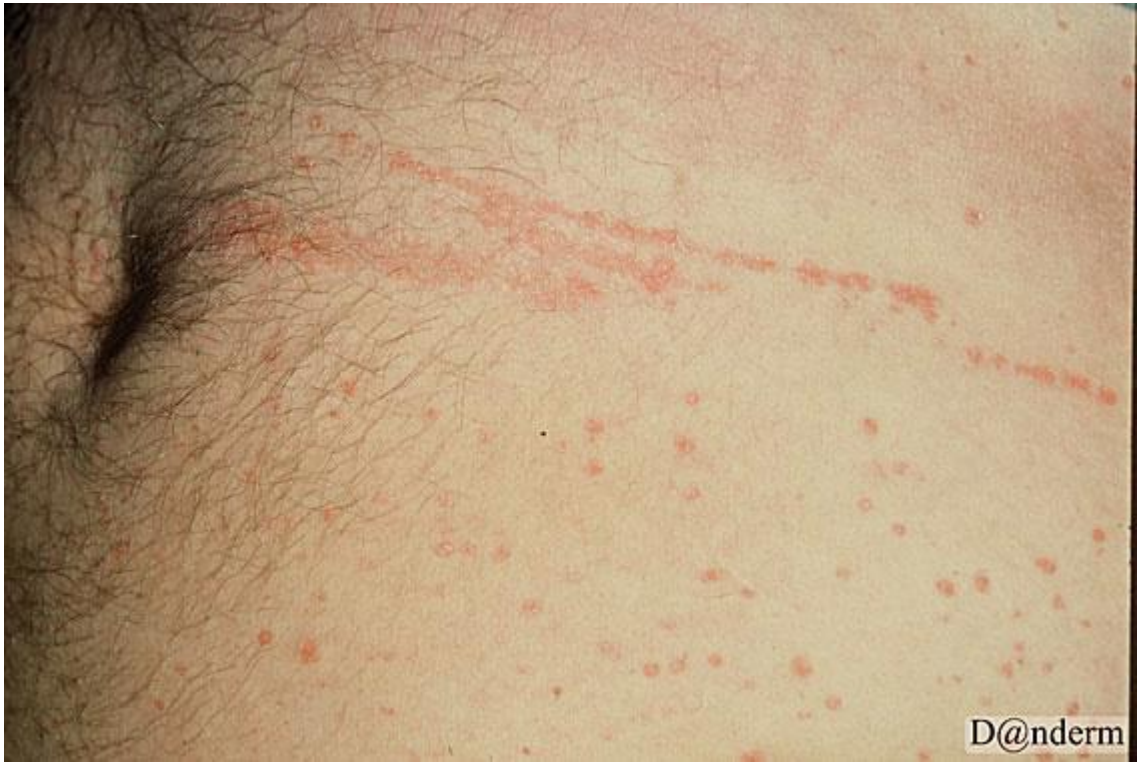
- Acute and generalised
- Red flag



Triggers

- Trauma
- Infection (esp strep throat infection)
- Drugs (lithium, chloroquinine, beta blockers)
- Ultraviolet light
- Stress

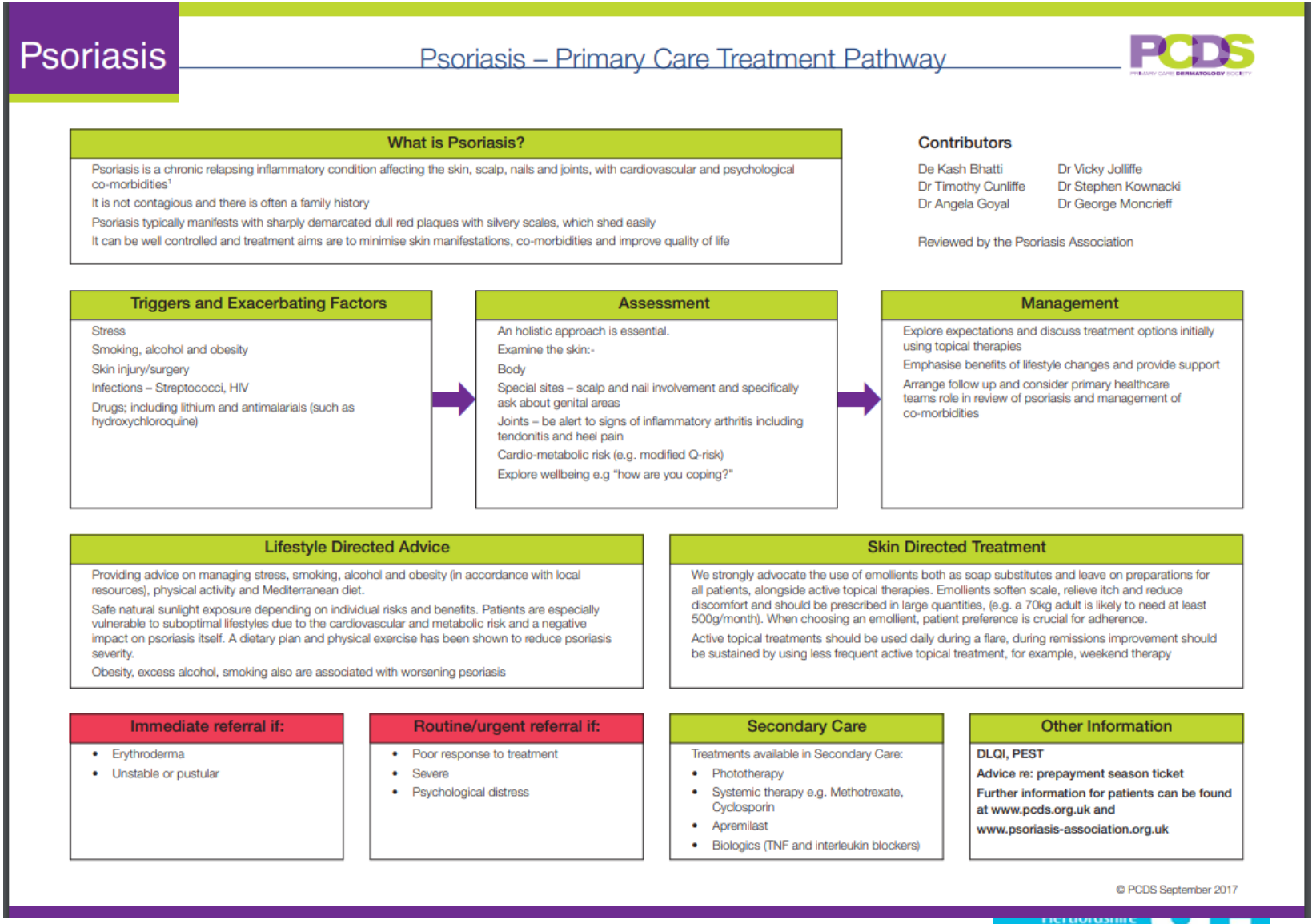
Koebner phenomenon



Co-morbidities

- Psoriatic arthritis
- Metabolic syndrome (obesity, dyslipidaemia, hypertension and glucose intolerance)
- Cardiovascular disease (relative risk greatest in younger patients with severe psoriasis Gelfand et al 2006)
- Inflammatory bowel disease esp Crohn's disease
- Psychological / psychiatric problems
- Hepatotoxicicty (especially from treatment with methotrexate)
- Nephrotoxicity (especially from treatment with ciclosporin)
- Non-melanoma skin cancers (especially from psoralen and ultraviolet light A (PUVA) treatment) (Wakelin et al 2015).
- Lifestyle issues – smoking and drinking (Penzer and Ersser 2010)

PCDS guidance



Psoriasis

Psoriasis – Primary Care Treatment Pathway

PCDS

What is Psoriasis?

Psoriasis is a chronic relapsing inflammatory condition affecting the skin, scalp, nails and joints, with cardiovascular and psychological co-morbidities[1]

It is not contagious and there is often a family history

Psoriasis typically manifests with sharply demarcated dull red plaques with silvery scales, which shed easily

It can be well controlled and treatment aims are to minimise skin manifestations, co-morbidities and improve quality of life

Contributors

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Reviewed by the Psoriasis Association

Triggers and Exacerbating Factors

Stress

Smoking, alcohol and obesity

Skin injury/surgery

Infections – Streptococci, HIV

Drugs; including lithium and antimalarials (such as hydroxychloroquine)

Assessment

An holistic approach is essential.

Examine the skin:-

Body

Special sites – scalp and nail involvement and specifically ask about genital areas

Joints – be alert to signs of inflammatory arthritis including tendonitis and heel pain

Cardio-metabolic risk (e.g. modified Q-risk)

Explore wellbeing e.g "how are you coping?"

Management

Explore expectations and discuss treatment options initially using topical therapies

Emphasise benefits of lifestyle changes and provide support

Arrange follow up and consider primary healthcare teams role in review of psoriasis and management of co-morbidities

Lifestyle Directed Advice

Providing advice on managing stress, smoking, alcohol and obesity (in accordance with local resources), physical activity and Mediterranean diet.

Safe natural sunlight exposure depending on individual risks and benefits. Patients are especially vulnerable to suboptimal lifestyles due to the cardiovascular and metabolic risk and a negative impact on psoriasis itself. A dietary plan and physical exercise has been shown to reduce psoriasis severity.

Obesity, excess alcohol, smoking also are associated with worsening psoriasis

Skin Directed Treatment

We strongly advocate the use of emollients both as soap substitutes and leave on preparations for all patients, alongside active topical therapies. Emollients soften scale, relieve itch and reduce discomfort and should be prescribed in large quantities, (e.g. a 70kg adult is likely to need at least 500g/month). When choosing an emollient, patient preference is crucial for adherence.

Active topical treatments should be used daily during a flare, during remissions improvement should be sustained by using less frequent active topical treatment, for example, weekend therapy

Immediate referral if:

- Erythroderma
- Unstable or pustular

Routine/urgent referral if:

- Poor response to treatment
- Severe
- Psychological distress

Secondary Care

Treatments available in Secondary Care:

- Phototherapy
- Systemic therapy e.g. Methotrexate, Cyclosporin
- Apremilast
- Biologics (TNF and interleukin blockers)

Other Information

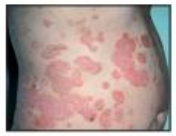
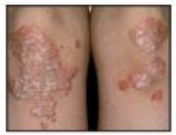
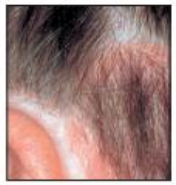
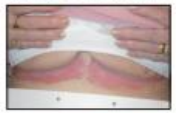
DLQI, PEST

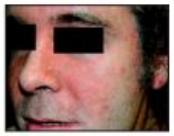
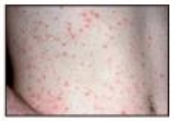
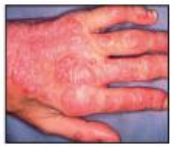
Advice re: prepayment season ticket

Further information for patients can be found at www.pcds.org.uk and www.psoriasis-association.org.uk

Psoriasis

Psoriasis – Clinical Features and Treatment

Trunk & Limbs  	**Clinical Features** Well defined symmetrical small and large scaly plaques, predominantly on extensor surfaces but can be generalised	**Treatment** Calcipotriol/Betamethasone (Dovobet® Enstilar®) combination product should be used first line, once daily until lesions flatten. This treatment protocol differs from NICE guidance but is more patient centred and clinically effective using once daily dosage If the response is sub-optimal at 8-12 weeks: 1. Review adherence 2. Very thick scale can act as a barrier to topical therapies and consider using a salicylic acid preparation to descale (e.g. diprosalic® ointment once daily) 3. Consider other therapies such as tar products (e.g. Exorex Lotion®), Tazarotene (Zorac®) or Dithranol (e.g. Micanol®). See www.pcds.org.uk for more details During remissions improvement should be sustained with emollients and by using less frequent active topical treatment, for example, weekend therapy
Scalp Psoriasis 	**Clinical Features** Much more common than appreciated and easier felt than seen. May be patchy Socially embarrassing Typically extends just beyond the hairline, best seen on nape of neck.	**Treatment** Treatments can be messy and this can be a difficult site to treat, so it is important to manage your patients expectations and provide clear explanations 1. Descale if necessary with coconut oil or if more severe Sebco Ointment® – massaged onto the scalp generously and ideally left over night. Wash out with Capasal® shampoo. Continue to use until the scale becomes much thinner 2. Treat ongoing inflammation with: • Potent topical steroids such as Synalar Gel® or Diprosalic scalp application applied at night • Dovobet Gel® could be used 3. Maintenance therapy: • Once or twice weekly tar based shampoo such as Capasal® Alphosyl® or Polytar® • Once to twice weekly potent topical steroids as above or more frequently if needed • If the scale thickens then revert to Sebco ointment
Flexures & Genetalia 	**Clinical Features** Erythematous patches, shiny red,and lack scale. Commonly mistaken for candidiasis.	**Treatment** **Eumovate cream or Ointment** **Daktacort** **Silkis**

Face 	**Clinical Features** An uncommon and distressing site sometimes with plaques but more often similar to that seen in seborrhoeic dermatitis	**Treatment** **Eumovate Ointment** – many would use this initially and follow on with any of • Protopic 0.1% ointment – twice a day (off license) and reducing with response • Silkis ointment – can cause irritation so introduce gradually (initially twice a week) • Dactocort cream twice a day for more seborrhoeic types
Guttate Psoriasis 	**Clinical Features** Rapid onset of very small 'raindrop like' plaques, mostly on torso and limbs, usually following a streptococcal infection May lack scale initially An important differential is secondary syphilis	**Treatment** Refer to secondary care for light therapy, and in the interim consider treating with tar lotion, (Exorex lotion®)2-3 times a day There is insufficient evidence for the routine use of antibiotics however in cases of recurrent guttate psoriasis with proven streptococcal infections, consider the early use of antibiotics and/or referral for tonsillectomy
Palmoplantar pustular 	**Clinical Features** **Very resistant and difficult to treat. Creamy sterile pustules mature into brown macules**	**Treatment** Stop smoking Dermovate Ointment at night under polythene occlusion e.g. Patches of Clingfilm® A moisturiser of choice to be used through the day Early referral important for hand and foot PUVA / Acitretin
Nails 	**Clinical Features** **In about 50% of patients Pitting, hyperkeratosis and Onycholysis** NB. Look for arthritis and co-existing fungal infection. NB Terbinafine may aggravate psoriasis	**Treatment** Practical tips – keep nails short, use nail buffers. Nail varnish and gel safe to use Trickle potent topical steroid scalp application or apply Dovobet gel under the onycholytic nail
Psoriatic Arthritis 	**Clinical Features** Inflammatory polyarthritis, spondylarthritis, synovitis, dactylitis, and tendonitis.	**Treatment** Psoriatic arthritis is under recognised and it is very important it is diagnosed and referred early to Rheumatology because of the risk of permanent and radiological damage Refer to the PCDS website for more information www.pcds.org.uk/clinical-guidance/psoriatic-arthropathy

Please note this guidance is the views of the contributors and does not consider costs of treatments

Screening for co-morbidities

- NICE CG 153 (2012) advises that people with any type of psoriasis should be assessed for psoriatic arthritis and co-morbidities specifying cardiovascular risk, giving links to other NICE guidance such as NICE CG 67 (2008) (lipid modification).
- NICE CG153 (2012) people with any type of psoriasis should be assessed for depression alongside assessing disease severity and impact
- NICE CG91 (2010) (depression in adults with a chronic physical health problem) depression is two to three times more common in people with a chronic physical health problem than in those in good physical health. Around 20% of people with a chronic physical health problem have depression.

Assessment of symptoms

- NICE CG 153 (2012) at each visit assess using:
- Physician's global assessment and patient's global assessment (each classifying as classify as clear, nearly clear, mild, moderate, severe or very severe)
- DLQI
- In specialist settings use PASI

Topical preparations for psoriasis

- Emollients
- Topical corticosteroids
- Vitamin D analogues – calcipitriol (Dovonex, Dovobet, Enstilar), calcitriol (Silkis), tacalcitol (Curatoderm)
- Coal tar – crude coal tar, Exorex, Psoriderm, Cocois, Sebco
- Dithranol – Dithrocream, Micanol
- Flexural areas and face – mild-moderate topical corticosteroids (BNF 2012)
- Scalp – tar shampoo, keratolytic, topical corticosteroid or vitamin D analogue
- Cochrane Skin Group – 23 reviews
- Unstable psoriasis – refer
- NICE CG153 (2012)

Topical therapy (NICE 153 2012)

- Offer potent TCS OD plus vitamin D or analogue OD (applied separately) for up to 4 weeks (adults trunk and limbs)
- If ineffective after a max of 8 weeks offer vitamin D or analogue alone applied twice daily
- If ineffective after 8-12 weeks offer either a potent TCS applied twice daily for up to 4 weeks or a coal tar prep applied once or twice daily
- **If this cannot be used or once daily prep would improve adherence** (in adults) offer combined calcipitriol monohydrate and betamethasone diproprionate OD up to 4 weeks
- Review 4 weeks after starting new topical treatment (adults), 2 weeks (children)

Topical treatment – face, flexures, genitals

- Mild or moderate TCS once or twice daily up to 2 weeks
- If ineffective or risk of TCS-induced side-effects offer calcineurin inhibitor twice daily for up to 4 weeks (unlicensed indication)
- Do not use potent or very potent TCS in these areas

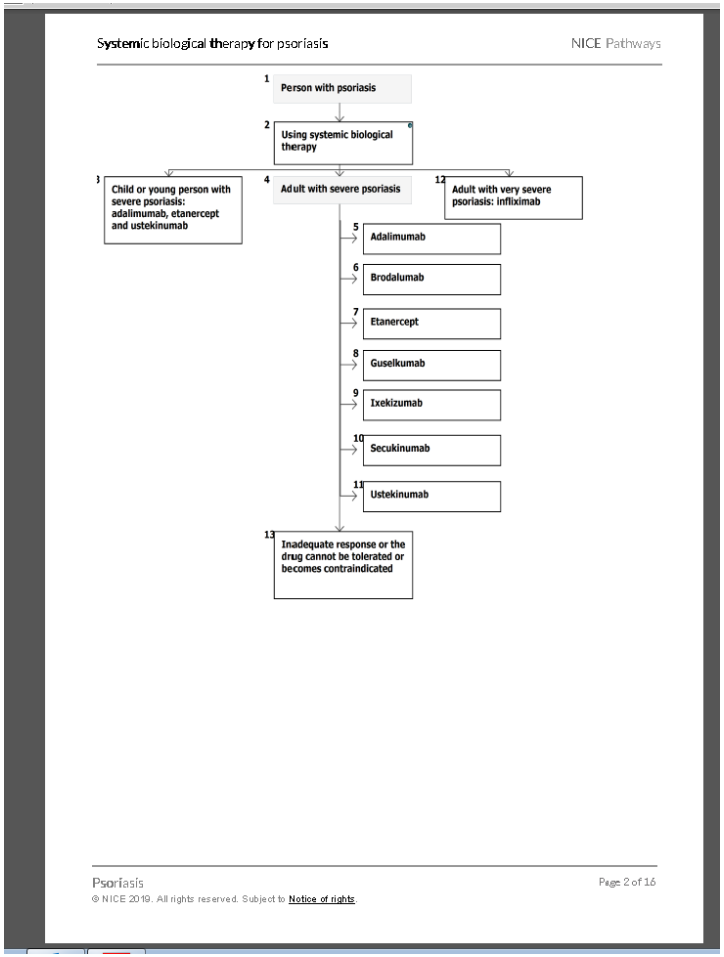
Phototherapy

- Narrowband UVB vs PUVA

Systemic therapy

- Methotrexate - NICE 1st line
- Ciclosporin – NICE 1st line if need rapid control, have PPP or considering conception
- Acitretin – If above ineffective or contraindicated or pustular forms
- Apremilast – If unable to take biologics/not contraindicated in TB

Biologic treatments



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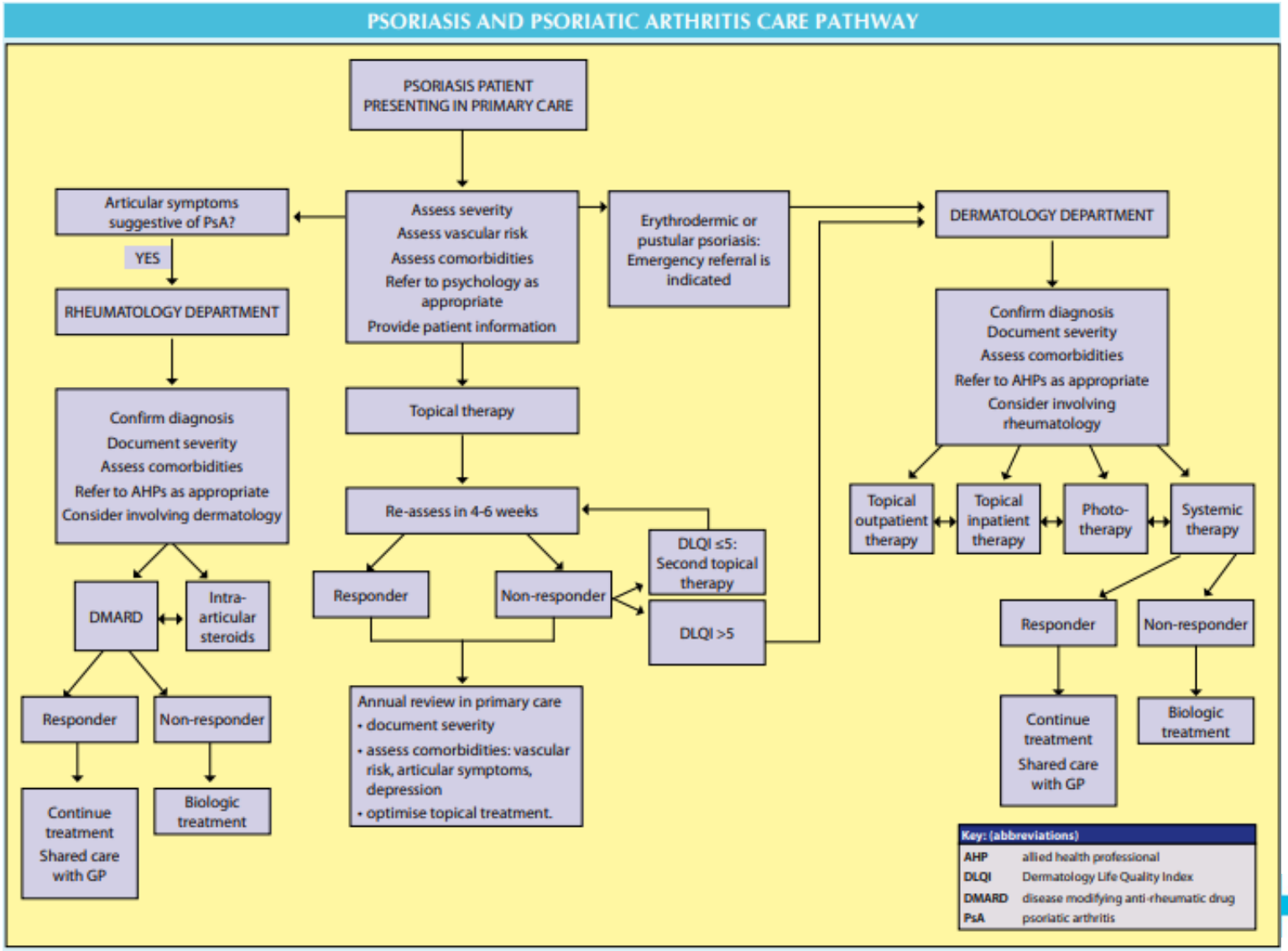
SIGN guidance (2010)



PSP top 10

- **1. Do lifestyle factors such as diet, dietary supplements, alcohol, smoking, weight loss and exercise play a part in treating psoriasis?**
- **2. Does treating psoriasis early (or proactively) reduce the severity of the disease, make it more likely to go into remission, or stop other health conditions developing?**
- **3. What factors predict how well psoriasis will respond to a treatment?**
- **4. What is the best way to treat the symptoms of psoriasis: itching, burning, redness, scaling and flaking?**
- **5. How well do psychological and educational interventions work for adults and children with psoriasis?**
- **6. Does treating psoriasis help improve other health conditions, such as psoriatic arthritis, cardiovascular disease, metabolic syndrome and stress?**
- **7. Why do psoriasis treatments stop working well against psoriasis and when they stop working well, what's the best way to regain control of the disease?**
- **8. To what extent is psoriasis caused by a person's genes or other factors, such as stress, gut health, water quality, or change in the weather / temperature?**
- **9. Is a person with psoriasis more likely to develop other health conditions (either as a consequence of psoriasis or due to the effect of treatments for psoriasis)? If so, which ones?**
- **10. What's the best way to treat sudden flare ups of psoriasis?**

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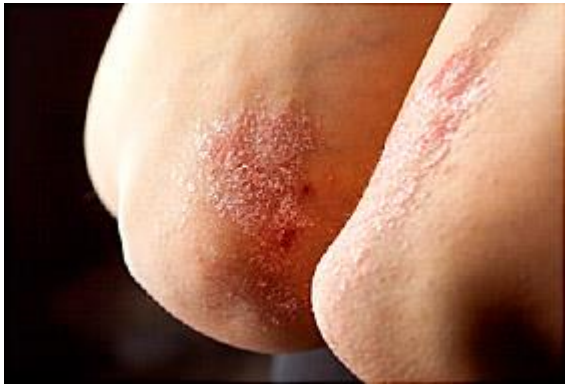
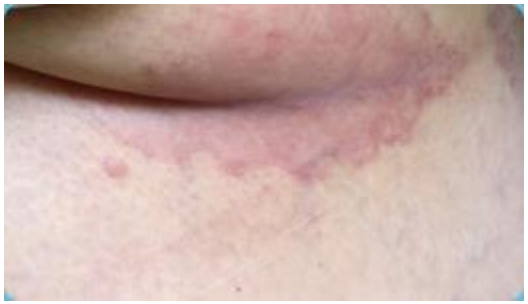
First line treatment:





List the treatments you will prescribe for this patient with plaque psoriasis to their elbows and inverse psoriasis under their breasts. No other areas are affected.

Support for patients

- https://www.psoriasis-association.org.uk/ We raise awareness of psoriasis; provide information and support to people who are affected by psoriasis; and promote and fund research into psoriasis.
- www.changingfaces.org.uk Changing faces are 'a charity for people and families who are living with conditions, marks or scars that affect their appearance.'
- www.kidscape.org.uk Kidscape is a charity supporting children and families in the area of bullying and abuse. Its mission is 'to ensure children live in a safe and nurturing environment. By providing training, support and advice to children, parents, schools and those in professional contact with young people, we enable them to gain knowledge and develop the confidence and skills to challenge abuse and bullying in all its forms'.
- www.samaritans.org Samaritans are there to 'support anyone in distress, around the clock, through 201 branches across the UK and Republic of Ireland.'

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References and acknowledgements

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