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 NICE guidelines
  - Identify appropriate treatments for severity and presentation
  - Be aware of indications to refer appropriately

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

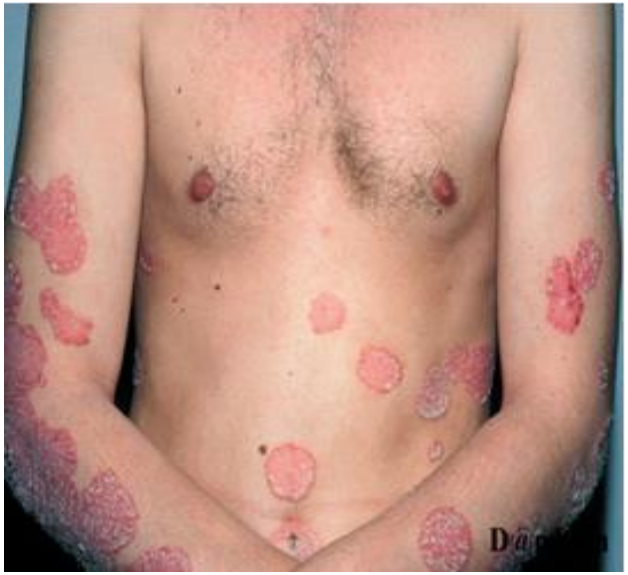
Overview of pathophysiology

- 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;

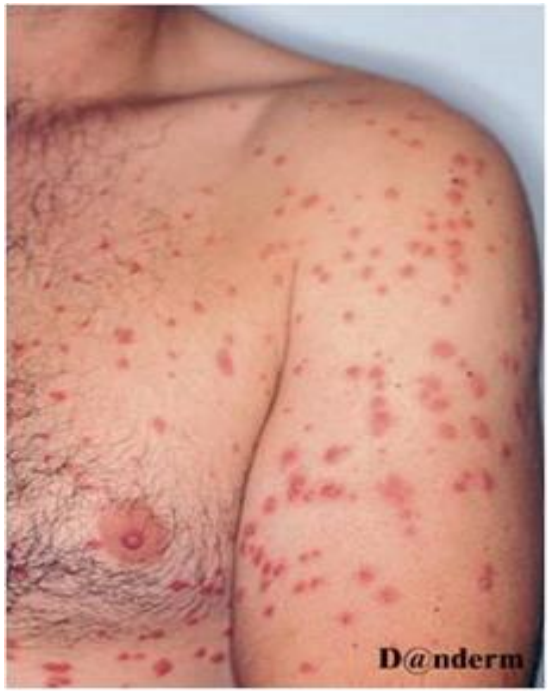
Presentations

- Classic plaque – often on extensor surfaces

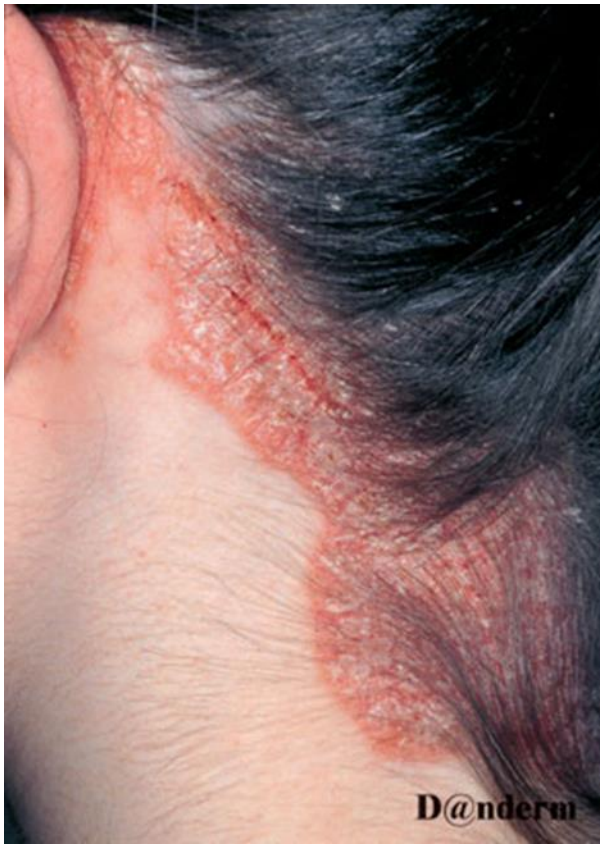


Presentations

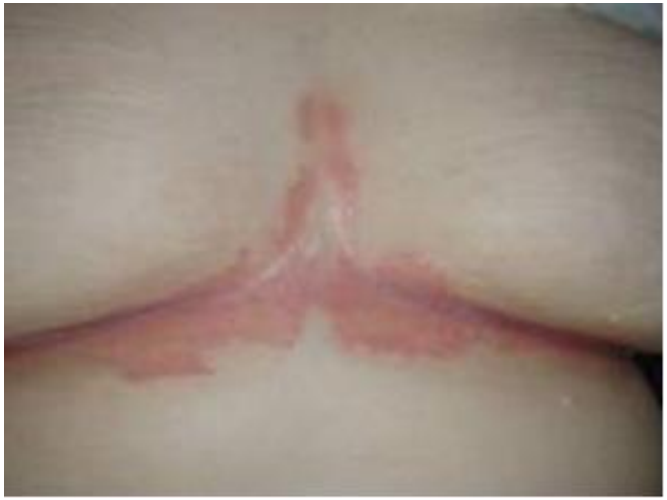
- Guttate



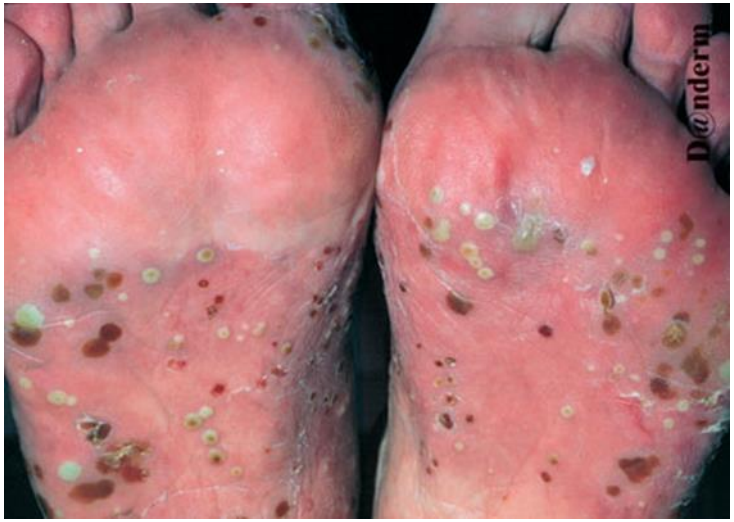
Scalp psoriasis



Inverse (flexural) psoriasis

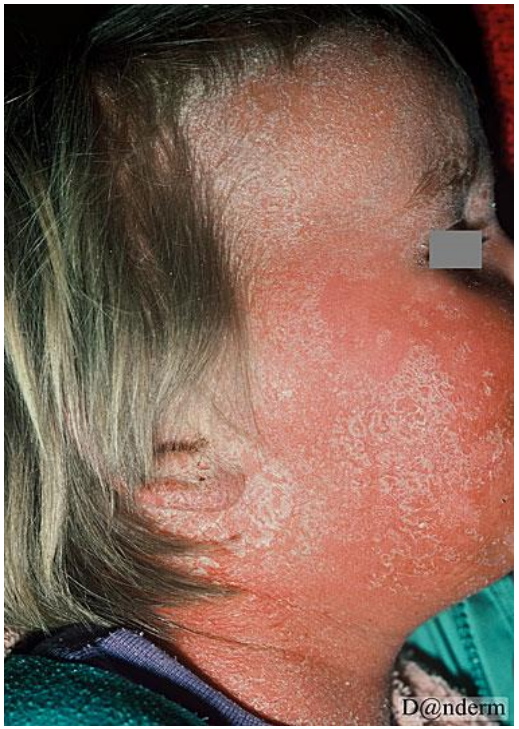


Palmoplantar pustulosis



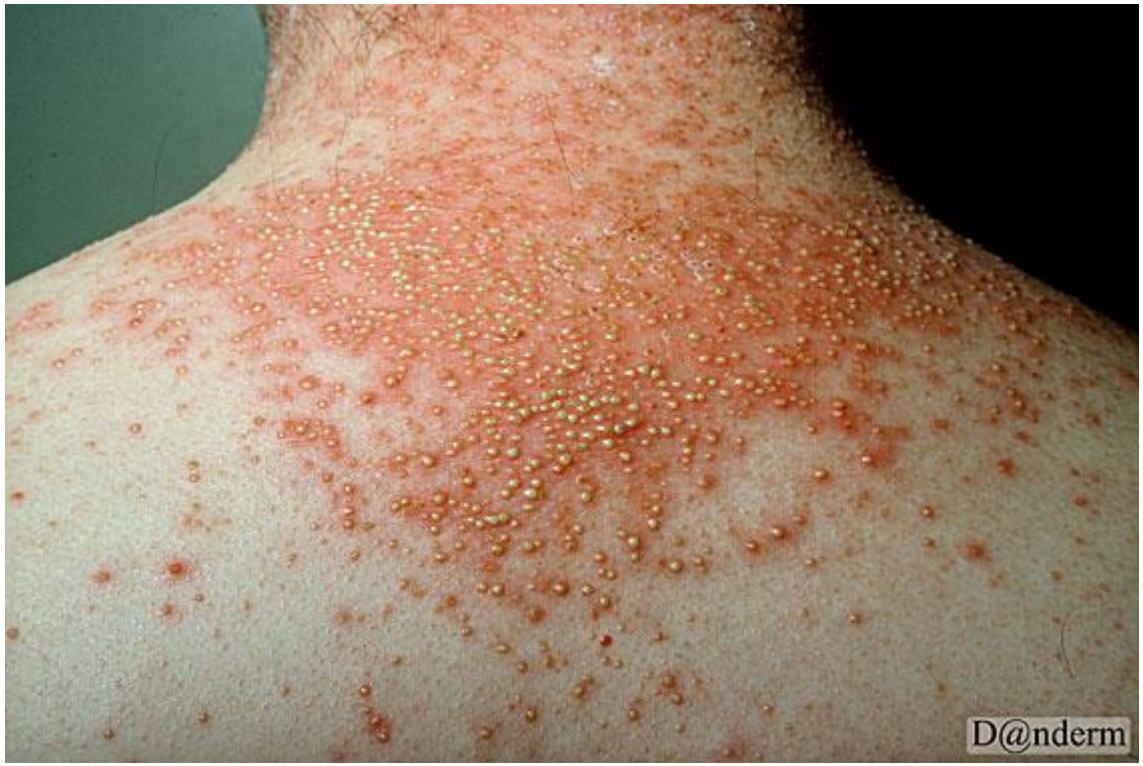
Erythrodermic psoriasis

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



Pustular psoriasis 1

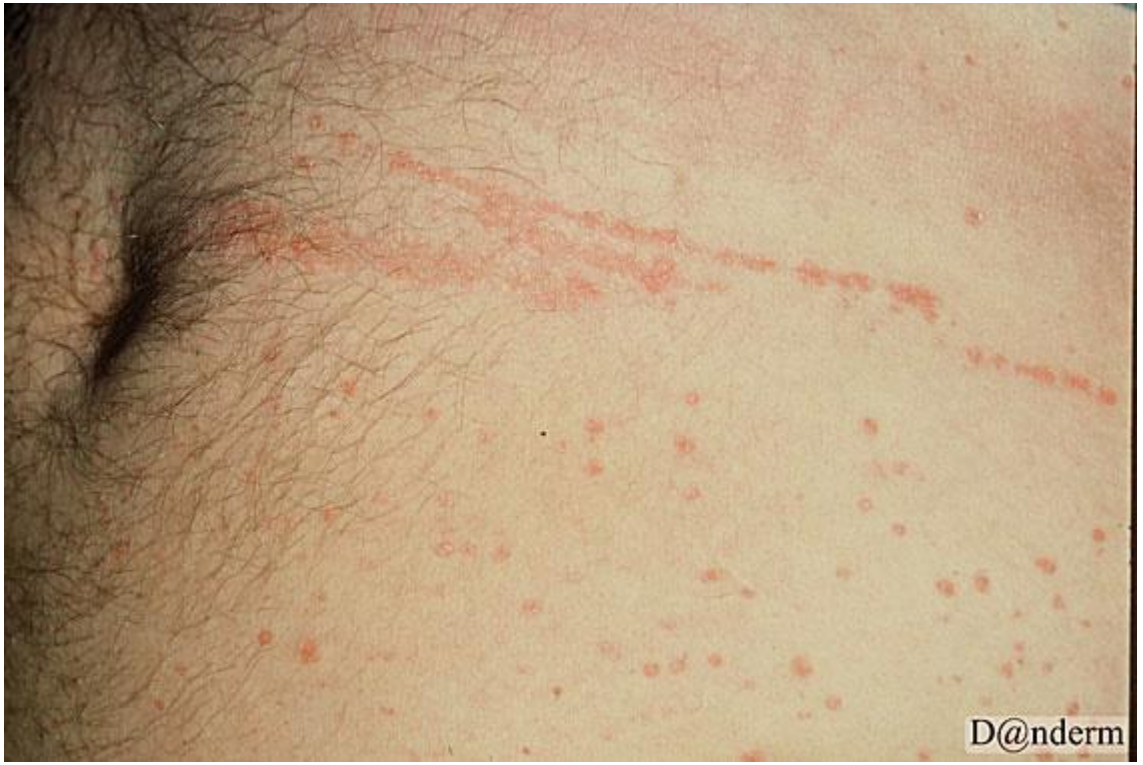
- Acute and generalised
- Red flag



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)

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

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), 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

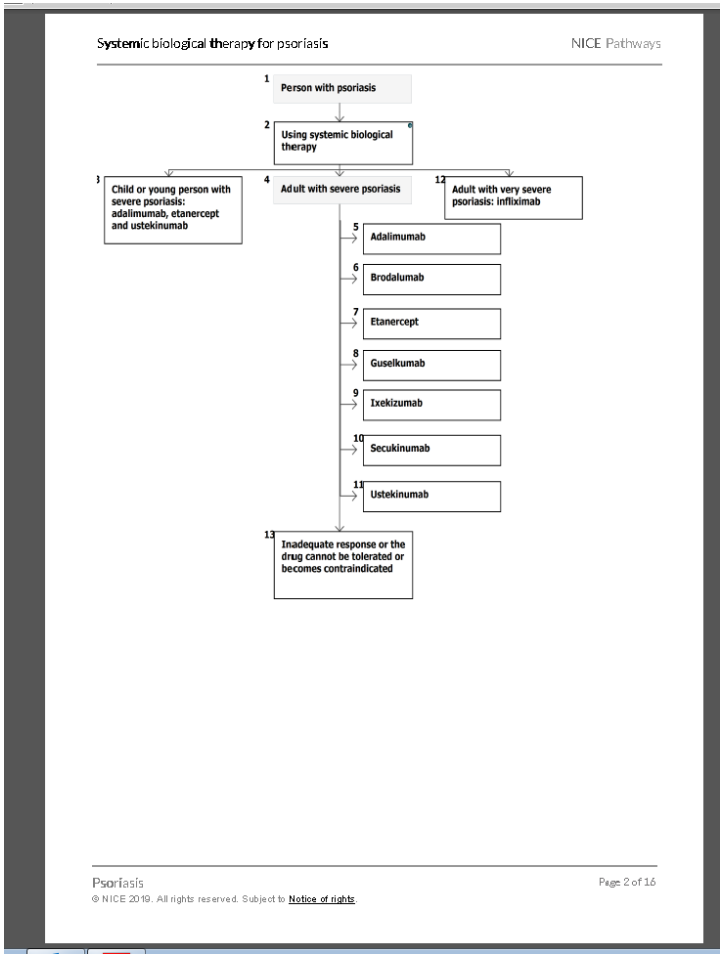
Phototherapy

- 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



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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Support for patients

- www.samaritans.org Samaritans are there to 'support anyone in distress, around the clock, through 201 branches across the UK and Republic of Ireland.'
- 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'.
- 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.

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References and acknowledgements

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