# The assessment and management of psoriasis

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# Welcome

A new clinical guideline from the National Institute for Health and Clinical Excellence (NICE) hopes to ease the distress felt by people who have psoriasis. It is believed that psoriasis affects over 1.3 million people in the UK and the disease can contribute to low self-esteem, anxiety, embarrassment and depression. Nurses and GPs can play a key role in the assessment and management of psoriasis by assessing the impact psoriasis has on the physical, psychological and social wellbeing of their patients.





# Background

In October 2012, NICE published its first clinical guideline on the assessment and management of psoriasis. Plague psoriasis is a common inflammatory skin condition characterised by well-delineated red, flaky, crusty patches of skin covered with silvery scales that vary in extent from a few patches to generalised involvement. Plague psoriasis is by far the most common form of the condition (about 90% of people with psoriasis). Other types of psoriasis include guttate psoriasis and pustular (localised or generalised) forms. Distinctive nail changes occur in around 50% of all those affected. Psoriasis can occur at any age, although is uncommon in children (0.71%) and the majority of cases occur before 35 years.

Psoriasis for many people results in profound functional, psychological, and social morbidity, with consequent reduced levels of employment and income. Factors that contribute to this include symptoms related to the skin (for example, chronic itch, bleeding, scaling and nail involvement), problems related to treatments, psoriatic arthritis, and the effect of living with a highly visible, stigmatising skin disease. Even people with minimal involvement state that psoriasis has a major effect on their life. Several studies have also reported that people with psoriasis, particularly those with severe disease, may be at increased risk of cardiovascular disease, lymphoma

and non-melanoma skin cancer.

Around one in seven people with psoriasis will develop psoriatic arthritis, a progressive condition, which can cause pain, stiffness and swelling in and around the joints. Assessment for psoriatic arthritis should be undertaken annually and referral to a rheumatologist made promptly if suspected. All people with psoriasis should be offered advice on healthy lifestyle and risk factors for cardiovascular comorbities should be discussed. Support for behavioural change tailored to meet the needs of the individual should be provided in line with NICE guidance.

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#### **KEY RECOMMENDATIONS FOR HEALTHCARE PROFESSIONALS**

For most people, psoriasis is managed in primary care, with specialist referral being needed at some point for up to 60% of people. Treatment and care should take into account patients' needs and preferences. People with psoriasis should have the opportunity to make informed decisions about their care and treatment, in partnership with their healthcare professionals. Commonly cited triggers for referral for specialist opinion include: diagnostic uncertainty; request for further counselling or education including demonstration of topical treatment; failure to respond to appropriately used topical therapy for three months; psoriasis at sites that are difficult to treat and/or at high impact sites; if unresponsive to initial therapy; adverse reactions to topical therapies; need for systemic therapy, phototherapy, day treatment, or inpatient admission; disability preventing work or excessive time off work; significant psychosocial disability; presence of



psoriatic arthritis and; life threatening forms of psoriasis where urgent referral may be justified.

The guideline suggests that when seeing a patient with psoriasis, the following assessment should be undertaken as standard:

- Disease severity.
- The impact of disease on physical, psychological and social wellbeing.
- Whether they have psoriatic arthritis.
- The presence of comorbidities. Following assessment in a nonspecialist setting, refer people for dermatology specialist advice if:
- there is diagnostic uncertainty or any type of psoriasis is severe 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. Patients should be assessed for psoriatic arthritis using a validated Psoriasis
  Epidemiology Screening Tool (PEST) questionnaire (see page 6).

#### **PEST** questionnaire

Score one point for each question answered in the affirmative. A total score of three or more is indicative of psoriatic arthritis. As soon as psoriatic arthritis is suspected, refer the person to a rheumatologist for assessment and advice about planning their care (be aware that the PEST questionnaire does not detect axial arthritis or inflammatory back pain).

#### TREATMENT OPTIONS Topical therapy

Topical therapy is the first line treatment for psoriasis. Second and third line treatments (eg. phototherapy, biologics or systemic drug therapy such as methotrexate) must be specialist led. The phrase 'difficult-totreat sites' encompasses the face, flexures, genitalia, scalp, palms and soles and are so-called because psoriasis at these sites may have especially high impact, may result in functional impairment, requires particular care when prescribing topical therapy and can be resistant to treatment.

Offer practical support and advice about the use and application of topical treatments. Advice should be provided by healthcare professionals who are trained and competent in the use of topical therapies. Support people to adhere to treatment in line with the medicines adherence pathway.

When offering topical agents:

- take into account patient preference, cosmetic acceptability, practical aspects of application and the site(s) and extent of psoriasis to be treated
- discuss the variety of formulations available and, depending on the person's preference, use:
  - cream, lotion or gel for widespread psoriasis
  - lotion, solution or gel for the scalp or

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hair-bearing areas

- ointment to treat areas with thick adherent scale
- be aware that topical treatment alone may not provide satisfactory disease control, especially in people with psoriasis that is extensive (for example, more than 10% of body surface area affected) or at least 'moderate' on the static Physician's Global assessment. For adults with trunk and limb psoriasis,

a potent corticosteroid should be offered, applied once daily plus vitamin D or a vitamin D analogue applied once daily (applied separately, one in the morning and the other in the evening) for up to four weeks as initial treatment. When offering a corticosteroid for topical treatment select the potency and formulation based on the person's need. Do not use very potent corticosteroids continuously at any site for longer than four weeks.

Do not use potent corticosteroids continuously at any site for longer than eight weeks.

Be aware that continuous use of potent or very potent corticosteroids may cause:

- Irreversible skin atrophy and striae.
- Psoriasis to become unstable.
- Systemic side effects when applied continuously to extensive psoriasis (for example, more than 10% body surface area affected).

Explain the risks of these side effects to people undergoing treatment (and their families or carers where appropriate) and discuss how to avoid them.

Aim for a break of four weeks between courses of treatment with potent or very potent corticosteroids. Consider topical treatments that are not steroid-based (such as vitamin D or vitamin D analogues or coal tar) as needed to maintain psoriasis disease control during this period.

All adult patients should be reviewed four weeks after commencing a new topical therapy to evaluate tolerability, toxicity, and initial response to treatment.

If once-daily application of a potent corticosteroid plus once-daily vitamin D or a vitamin D analogue does not result in clearance, near clearance or satisfactory control of trunk or limb psoriasis in adults after a maximum of eight weeks, offer vitamin D or a vitamin D analogue alone applied twice daily.

#### Phototherapy

Narrowband ultraviolet B (UVB) phototherapy should be offered to people

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Question	Yes	No
1. Have you ever had a swollen joint (or joints)?		
2. Has a doctor ever told you that you have arthritis?		
3. Do your finger nails or toenails have holes or pits?		
4. Have you had pain in your heel?		
5. Have you had a finger or toe that was completely swollen and painful for no apparent reason?		

with plaque or guttate pattern psoriasis that cannot be controlled with topical treatments alone. Treatment with narrowband UVB phototherapy can be given two or three times a week depending on patient preference. People receiving narrowband UVB should be told that a response may be achieved more quickly with treatment three times a week. Alternative second- or third-line treatment should be offered when:

- Narrowband UVB phototherapy results in an unsatisfactory response or is poorly tolerated.
- There is a rapid relapse following completion of treatment (rapid relapse is defined as greater than 50% of baseline disease severity within 3 months).
- Accessing treatment is difficult for logistical reasons (for example, travel, distance, time off work or immobility).
- The person is at especially high risk of skin cancer.

Consider psoralen31 (oral or topical) with local ultraviolet A (PUVA) irradiation to treat those with palmoplantar pustulosis. When considering PUVA for psoriasis (plaque type or localised palmoplantar pustulosis) discuss with the person:

- Other treatment options.
- That any exposure is associated with an increased risk of skin cancer (squamous cell carcinoma).
- That subsequent use of ciclosporin may increase the risk of skin cancer, particularly if they have already received more than 150 PUVA treatments.
- That risk of skin cancer is related to the number of PUVA treatments.
  Do not routinely offer co-therapy with

acitretin when administering PUVA. Consider topical adjunctive therapy in people receiving phototherapy with broadband or narrowband UVB who:

 Have plaques at sites that are resistant or show an inadequate response (for example, the lower leg) to phototherapy alone, or at difficult-to-treat or high need, covered sites (for example, flexures and the scalp), and/or

- Do not wish to take systemic drugs or in whom systemic drugs are contraindicated.
- Do not routinely use phototherapy (narrowband UVB, broadband UVB or PUVA) as maintenance therapy.

Ensure that all phototherapy equipment is safety-checked and maintained in line with local and national policy.

Healthcare professionals who are giving phototherapy should be trained and competent in its use and should ensure an appropriate clinical governance framework is in place to promote adherence to the indications for and contraindications to treatment, dosimetry and national policy on safety standards for phototherapy.

#### SYSTEMIC THERAPY

Responsibility for use of systemic therapy should be in specialist settings only. Certain aspects of supervision and monitoring may be delegated to other healthcare professionals and completed in non-specialist settings, in which case, such arrangements should be formalised.

When offering systemic therapy, tailor the choice of agent and dosing schedule to the needs of the individual and include consideration of:

- the person's age
- disease phenotype, pattern of activity and

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previous treatment history

- disease severity and impact
- the presence of psoriatic arthritis (in consultation with a rheumatologist)
- conception plans
- comorbidities
- the person's views.

Be aware of the benefits of, contraindications to and adverse effects associated with systemic treatments.

Explain the risks and benefits to people undergoing this treatment (and their families or carers where appropriate), using absolute risks and natural frequencies when possible. Support and advice should be provided by healthcare professionals who are trained and competent in the use of systemic therapies.

When reviewing response to systemic therapy, take into account:

- disease severity compared with baseline (for example, PASI baseline to endpoint score)
- control of psoriatic arthritis disease activity (in consultation with a rheumatologist if necessary)
- the impact of the disease on the person's physical, psychological and social wellbeing
- the benefits versus the risks of continued treatment
- the views of the person undergoing treatment (and their family or carers where appropriate).

People using systemic treatment for all types of psoriasis should be monitored in accordance with national and local drug guidelines and policy.

Offer adjunctive topical therapy to people with psoriasis using systemic therapy to optimise treatment outcomes.

#### Systemic non-biological therapy

Offer systemic non-biological therapy to people with any type of psoriasis if it cannot be controlled with topical therapy and it has a significant impact on physical, psychological or social wellbeing and one or more of the following apply:

- psoriasis is extensive (for example, more than 10% of body surface area affected or a PASI score of more than 10) or
- psoriasis is localised and associated with significant functional impairment and/or high levels of distress (for example severe nail disease or involvement at high-impact sites) or
- phototherapy has been ineffective, cannot be used or has resulted in rapid relapse (rapid relapse is defined as greater than 50% of baseline disease severity within 3 months).

#### Choice of drugs

Consider offering methotrexate as the first choice of systemic agent for people with psoriasis who fulfil the criteria for systemic therapy. In people with both active psoriatic arthritis and any type of psoriasis that fulfils the criteria for systemic therapy consider the choice of systemic agent in consultation with a rheumatologist.

Offer ciclosporin as the first choice of systemic agent for people who fulfil the criteria for systemic therapy and who:

- need rapid or short-term disease control (for example a psoriasis flare) or
- have palmoplantar pustulosis or
- are considering conception (both men and women) and systemic therapy cannot be avoided.

Consider changing from methotrexate to ciclosporin (or vice-versa) when response to the first-choice systemic treatment is inadequate.

Consider acitretin for adults, and in exceptional cases only for children and young people, in the following circumstances:

- if methotrexate and ciclosporin are not appropriate or have failed or
- for people with pustular forms of psoriasis.

#### Methotrexate and risk of hepatotoxicity

When considering the risks and benefits of treating any type of psoriasis with methotrexate, be aware that methotrexate can cause a clinically significant rise in transaminases and that long-term therapy may be associated with liver fibrosis.

# Methotrexate and monitoring for hepatotoxicity

Before and during methotrexate treatment, offer the person with any type of psoriasis an evaluation for potential risk of hepatotoxicity. Use standard liver function tests and serial serum procollagen III levels to monitor for abnormalities during treatment with methotrexate, taking into account pre-existing risk factors (for example obesity, diabetes and alcohol use), baseline results and trends over time.

When using serum procollagen III levels to exclude liver fibrosis or cirrhosis, be aware that the:

- test cannot be used in children and young people
- results may be unreliable in people with

psoriatic arthritis

• estimated positive predictive value is 23–95% and the estimated negative predictive value is 89–100%.

#### BIOLOGICS

Biological agents for psoriasis should be initiated and supervised only by specialist physicians experienced in the diagnosis and treatment of psoriasis.

If a person has both psoriasis and psoriatic arthritis, take into account both conditions before initiating or making changes to biological therapy and manage their treatment in consultation with a rheumatologist (see also Etanercept, infliximab and adalimumab for the treatment of psoriatic arthritis [NICE technology appraisal guidance 199] and Golimumab for the treatment of psoriatic arthritis [NICE technology appraisal guidance 220]).

When using the Dermatology Life Quality Index (DLQI), healthcare professionals should take into account any physical, sensory or learning disabilities, or communication difficulties that could affect the responses to the DLQI and make any adjustments they consider appropriate.

#### Adalimumab

Adalimumab is recommended as a treatment option for adults with plaque psoriasis for whom anti-tumour necrosis factor (TNF) treatment is being considered and when the following criteria are both met.

 The disease is severe as defined by a total PASI of 10 or more and a DLQI of more than 10.

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 The psoriasis has not responded to standard systemic therapies including ciclosporin, methotrexate and PUVA; or the person is intolerant of, or has a contraindication to, these treatments.

Adalimumab should be discontinued in people whose psoriasis has not responded adequately at 16 weeks. An adequate response is defined as either:

- a 75% reduction in the PASI score (PASI 75) from when treatment started or
- a 50% reduction in the PASI score (PASI 50) and a 5-point reduction in the Dermatology Life Quality Index (DLQI) from start of treatment.

#### Etanercept

The recommendations in this section are from Etanercept and efalizumab for the treatment of adults with psoriasis.

Etanercept, within its licensed indications, administered at a dose not exceeding 25 mg twice weekly is recommended for the treatment of adults with plaque psoriasis only when the following criteria are met:

- The disease is severe as defined by a total PASI of 10 or more and a DLQI of more than 10.
- The psoriasis has failed to respond to standard systemic therapies including ciclosporin, methotrexate and PUVA; or the person is intolerant to, or has acontraindication to, these treatments. Etanercept treatment should be

discontinued in patients whose psoriasis has not responded adequately at 12 weeks. An adequate response is defined as either:

• a 75% reduction in the PASI score from

when treatment started (PASI 75) or

 a 50% reduction in the PASI score (PASI 50) and a 5-point reduction in DLQI from when treatment started.

#### Infliximab

Infliximab, within its licensed indications, is recommended as a treatment option for adults with plaque psoriasis only when the following criteria are met.

- The disease is very severe as defined by a total PASI of 20 or more and a DLQI of more than 18.
- The psoriasis has failed to respond to standard systemic therapies such asciclosporin, methotrexate or PUVA, or the person is intolerant to or has a contraindication to these treatments. Infliximab treatment should be

continued beyond 10 weeks only in people whose psoriasis has shown an adequate response to treatment within 10 weeks. An adequate response is defined as either:

- a 75% reduction in the PASI score from when treatment started (PASI 75) or
- a 50% reduction in the PASI score (PASI 50) and a 5-point reduction in the DLQI from when treatment started.

#### Ustekinumab

Ustekinumab is recommended as a treatment option for adults with plaque psoriasis when the following criteria are met.

- The disease is severe, as defined by a total PASI score of 10 or more and a DLQI score of more than 10.
- The psoriasis has not responded to standard systemic therapies, including ciclosporin, methotrexate and PUVA, or

the person is intolerant of or has a contraindication to these treatments.

• The manufacturer provides the 90 mg dose (two 45 mg vials) for people who weigh more than 100 kg at the same total cost as for a single 45 mg vial.

Ustekinumab treatment should be stopped in people whose psoriasis has not responded adequately by 16 weeks after starting treatment. An adequate response is defined as either:

- a 75% reduction in the PASI score (PASI 75) from when treatment started or
- a 50% reduction in the PASI score (PASI 50) and a 5-point reduction in the DLQI score from when treatment started.

#### CHANGING TO AN ALTERNATIVE BIOLOGICAL DRUG

Healthcare professionals should consider changing to an alternative biological drug for adult patients if:

- the psoriasis does not respond adequately to a first biological drug as defined in NICE technology appraisals 35 (at 10 weeks after starting treatment for infliximab, 12 weeks for etanercept, and 16 weeks for adalimumab and ustekinumab; primary failure) or
- the psoriasis initially responds adequately but subsequently loses this response, (secondary failure) or the first biological drug cannot be tolerated or becomes contraindicated.

For adults in whom there is an inadequate response to a second biological drug, seek supra-specialist advice from a clinician with expertise in biological therapy.

# SUPPORT TOOLS AND PATIENT INFORMATION

NICE has published a range of support tools to help healthcare professionals use the clinical guideline. Healthcare professionals can access the NICE psoriasis pathway by visiting http://pathways.nice. org.uk/pathways/psoriasis this is a fast easy summary view of the NICE guidance on psoriasis.