Psoriasis is an immune-mediated chronic inflammatory skin disease which causes red, scaly plaques. Approximately one-third of patients develop symptoms before age 20 years and prevalence increases with age; most patients develop symptoms before the age of 35 years.1–2 There are no reliable estimates of prevalence in New Zealand, but in the United States and United Kingdom approximately 3% of adults are affected and less than 1% of children aged 12 years and under.1–3 Evidence suggests Māori and Pacific peoples have similar rates of psoriasis as New Zealand Europeans.4

Approximately 15% of patients with psoriasis have psoriatic arthritis, i.e. joint involvement or inflammation of tendons, ligaments or joint capsule insertions (enthesitis).1 Patients with significant inflammatory joint disease should be referred to a rheumatologist as systemic medicines, such as methotrexate or other disease modifying agents, are often used early to reduce the risk of permanent joint destruction and simultaneously may improve skin symptoms.3

Patients with psoriasis have an increased risk of other conditions, including fatty liver, cardiovascular disease, diabetes, inflammatory bowel disease and depression, and should be regularly assessed for symptoms and signs.3 Psoriasis is also

Dermatology

**KEY PRACTICE POINTS:**

- Most patients with psoriasis have chronic plaque psoriasis, the majority of whom can be managed in primary care
- Emollients can reduce pruritus, plaque scale and restore skin pliability
- Additional first-line topical medicines include intermittent courses of topical corticosteroids, topical calcipotriol, or both in combination
- Patients with psoriasis require life-long treatment and are at increased risk of cardiovascular disease, depression, inflammatory bowel disease and diabetes

Guidance on selecting topical treatments and tailoring treatment to the affected body area is available in a second article: **“Choosing a topical treatment for patients with chronic plaque psoriasis.”** Guidance on monitoring patients with moderate to severe psoriasis is available in the third article: **“Monitoring patients with moderate to severe psoriasis.”**
associated with a number of ophthalmic conditions, usually uveitis; expert opinion is that ocular involvement may occur in up to 10% of people with psoriasis.\(^5\)

**Chronic plaque psoriasis is the most prevalent form**

Approximately 90% of people with psoriasis have chronic plaque psoriasis, characterised by red plaques covered in white scale that are relatively symmetrical in distribution (Figure 1).\(^1\),\(^3\)

![Figure 1. Chronic plaque psoriasis on the lower back, with circumscribed thickened red plaques and diffuse white scale](image)

Image provided by DermnetNZ


**Severity is determined by the area affected, degree of erythema, induration and scaling of plaques**

The Psoriasis Area and Severity Index (PASI) score is a method for assessing disease severity which takes into account affected area, erythema, thickness and scale on head and neck, upper limbs, trunk and lower limbs. The PASI score may be required if patients are referred to secondary care as it can help determine the urgency of referral and is also used for assessment of Special Authority eligibility for treatment with TNF inhibitors.

For further information on assessing psoriasis severity, see: [www.dermnetnz.org/topics/pasi-score/](http://www.dermnetnz.org/topics/pasi-score/)

PASI forms and calculators are available from:

- DermNet New Zealand; an excel spreadsheet to allow easier calculation of PASI scores: [www.dermnetnz.org/assets/Uploads/scaly/docs/pasi-calculator.xls](http://www.dermnetnz.org/assets/Uploads/scaly/docs/pasi-calculator.xls)

- NZ Doctor (log-in required): Smartphone applications to calculate PASI score are discussed by Dr Amanda Oakley: [www.nzdoctor.co.nz/in-print/2016/may-2016/25--may/the-mhealth-era-is-here-mobile-dermatology-applications.aspx](http://www.nzdoctor.co.nz/in-print/2016/may-2016/25--may/the-mhealth-era-is-here-mobile-dermatology-applications.aspx)

Assessment of severity also requires consideration of functional impairment and the psychological impact of psoriasis. Patients can complete the ten question Cardiff Dermatology Life Quality Index (DLQI) to assess this: a result of < 10 indicates mild impact, 10–20 moderate impact and > 20 severe impact. A DLQI score may be requested when referring patients to secondary care.

To download the DLQI and instructions on scoring*, see: [sites.cardiff.ac.uk/dermatology/quality-of-life/dermatology-quality-of-life-index-dlqi/](http://sites.cardiff.ac.uk/dermatology/quality-of-life/dermatology-quality-of-life-index-dlqi/)

* Free for routine clinical use, however, printed copies require inclusion of copyright statement

**The majority of patients with chronic plaque psoriasis can be managed in primary care**

Approximately 80% of patients with chronic plaque psoriasis can be managed in primary care with the use of topical treatments.\(^6\) Patients with more than 10% of their body surface area\(^*\) affected should be referred to secondary care as topical treatments alone are unlikely to provide sufficient benefit and oral or injectable treatments initiated by a dermatologist may be required.\(^1\)

* The area covered by the patient’s palm with outstretched fingers (a “handprint”) is approximately equal to 1% of their body surface area.\(^7\)

**Patients with psoriasis require long-term treatment**

There is no cure for psoriasis and patients will typically have persistent disease throughout their lifetime. The aim of treatment is to improve the patient’s quality of life by reducing plaque size, scaling and thickness. Some patients with mild psoriasis, however, may choose not to undergo treatment, as they consider it more troublesome than the condition, and some will have spontaneous resolution of plaques without treatment.

**Lifestyle changes may improve symptom control**

Smoking, alcohol consumption and obesity are associated with the development of psoriasis and exacerbation of symptoms.\(^3\),\(^8\) Lifestyle changes such as weight loss, reducing alcohol intake or smoking cessation may therefore improve symptoms, although this has not been studied in clinical trials.\(^3\),\(^8\)
Emollients should be recommended to all patients with chronic plaque psoriasis

Emollients can be applied frequently and liberally, and used on symptomatic and asymptomatic skin, as they help restore skin pliability and reduce plaque scale and pruritus.* A variety of emollients are available fully subsidised and the most appropriate emollient is one a patient prefers and uses. If patients find soaps irritating, an emollient soap substitute, e.g. emulsifying ointment, can also be prescribed. In clinical trials of topical corticosteroids in patients with mild to severe chronic plaque psoriasis, a wide range of patients (15–47%) show improvement with the use of emollients only.*

Topical corticosteroids alone or in combination with calcipotriol are the first-line addition to emollients

Topical corticosteroids, topical calcipotriol and these medicines in combination provide additional benefit over and above the effect of emollients for patients with chronic plaque psoriasis. These topical medicines should be applied in sufficient quantities to cover symptomatic plaques. Second-line topical treatments for mild chronic plaque psoriasis include products containing coal or synthetic tar at concentrations of 0.5–12%, and keratolytics such as topical salicylic acid, used at concentrations of 2–5%.

For further information on prescribing topical treatments, see: “Choosing a topical treatment for patients with chronic plaque psoriasis”

It is essential to give the patient realistic expectations regarding topical treatments: advise patients to expect partial resolution rather than complete clearance. In clinical trials of topical calcipotriol, corticosteroids or combination treatment, on average PASI scores improve by 40–70%, so patients will often have some remaining symptoms. Psoriasis affecting the face, flexures, genitalia, scalp, palms and soles and nails is typically more difficult to treat.1

Relapses of psoriasis are expected

Relapse should not be regarded as treatment failure, but relapse frequency and the effect on quality of life should be taken into account when considering referral to secondary care. A meta-analysis reported that 88% of patients relapsed within six months of a course of topical treatment, with no consistent evidence that any treatment had lower rates of relapse than another.12

When to refer

Discussion with a dermatologist or rheumatologist is appropriate at any point during treatment if:1

- Patients develop joint involvement
- Symptoms spread to 10% or more of the body, or patients have a PASI score ≥ 10
- Psoriasis is having a major effect on the patient’s wellbeing, e.g. a DLQI score of ≥ 10
- Patients develop ocular complications

Assessment of DLQI and PASI score may be necessary for referral. Referral to a psychologist may be appropriate for patients with psoriasis that has worsened significantly due to stress. Annual influenza vaccination is recommended for patients taking oral or injectable medicines for the treatment of chronic plaque psoriasis.13

Follow-up in primary care

A follow-up appointment is recommended four to six weeks after treatment is initiated for adults, or two weeks after for children.1,3

Emphasise appropriate durations for the use of topical corticosteroids and that patients should leave at least four weeks between courses of topical corticosteroids on the same area of skin; severe adverse effects are more likely when patients continue treatment beyond recommended timeframes or without appropriate intervals between courses.

Acknowledgement: Thank you to Dr Amanda Oakley, Honorary Associate Professor and Dermatologist, Waikato District Health Board for expert review of this article.
References:


