Managing psoriasis in the elderly

While psoriasis remains incurable, GPs can — by prescribing appropriate topical treatments and judiciously referring — markedly improve outcomes. Nevertheless, as Dr Richard Parslew explains, GPs need to consider several issues when managing psoriasis in the elderly, including those of primary causes, emotional and physical consequences, and clinical treatments.

Around 1.2 million people in the UK suffer from psoriasis and with the ageing of the population, it is becoming increasingly widespread among the middle-aged and elderly. Any one of the several types of psoriasis (see Table 1) can undermine health-related quality of life (HRQoL) at any age. However, the psychological burden and HRQoL impact may be even greater among the elderly.

Beneath the surface

While the primary cause remains unknown, the consensus among researchers suggests that psoriasis arises from the interaction of multiple genes, immune dysfunction and environmental factors. Several lines of evidence support this model. For example:

- about 30 per cent of patients have a first-degree relative who suffers from the disease and psoriasis seems more common among Caucasians than in other ethnic groups, both of which implicate genetic factors;
- numerous environmental factors trigger or exacerbate psoriasis, including stress, infections, trauma (Koebner phenomenon) and certain medications (including some widely used by elderly people such as beta-blockers, NSAIDs and ACE inhibitors).

Psoriasis seems to arise when an environmental factor interacts with the inherited predisposition to

<table>
<thead>
<tr>
<th>Type of psoriasis</th>
<th>Clinical features</th>
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<tbody>
<tr>
<td>Plaque-type</td>
<td>Symmetric, bilateral thick red lesions with silvery scale; accounts for 80 per cent of cases</td>
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<tr>
<td>Guttate</td>
<td>Teardrop-shaped, pink to salmon scaly plaques; usually occurs on the trunk, less common on palms and soles</td>
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<tr>
<td>Pustular, localised</td>
<td>Erythematous papules or plaques studded with pustules; Usually occurs on palms or soles (palmoplantar pustular psoriasis)</td>
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<tr>
<td>Pustular, generalised</td>
<td>Same as localised, but wider involvement; may be associated with systemic symptoms (fever, malaise and diarrhoea); some patients do not have pre-existing psoriasis</td>
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<tr>
<td>Erythrodermic</td>
<td>Severe, intense, generalised erythema and scaling; covers body; often associated with systemic symptoms; some patients do not have pre-existing psoriasis</td>
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Table 1. Types of psoriasis and their clinical features

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activate helper Th1 (T_{h1}) lymphocytes. The T_{h1} cells release cytokines that stimulate keratinocyte proliferation and increase expression of adhesion molecules in blood vessels supplying the skin. In turn, the adhesion molecules augment cytokine production by T_{h1} lymphocytes, further promoting keratinocyte proliferation and increasing epidermal turnover.

This immunological cycle means chronic plaque psoriasis begins as papules, which coalesce into well-demarcated plaques. The lesions bleed if the silvery scale is removed (Auspitz sign) and over 80 per cent of patients report itch, which seems to have a complex aetiology, including increased levels of mast cells, substance P and nerve growth factor (NGF). Elbows and knees are the most common sites affected, although many patients develop lesions on their lower back, scalp or nails. Older patients (and others with a long duration of disease, those with extensive involvement or psoriatic arthritis) are especially prone to develop nail psoriasis. While rarely the presenting symptom, nail psoriasis may be confused with onychomycosis, another disease common in the elderly.

A common condition
Between 1.5 per cent and two per cent of the UK population suffers from psoriasis. Men and women seem to be equally likely to develop the condition. The age of onset peaks twice, once in the late teens and again in the late 50s. The prevalence declines by 28 per cent and 60 per cent between 70–79 years and 80–89 years respectively, compared with 60–69 years. The prevalence then falls to 47 per 10,000 in patients 90 years or over. A recent analysis reported that 24 per cent of UK psoriasis patients were more than 65 years old. The decline may suggest psoriasis goes into remission, that elderly patients may be less likely than younger people to bring the condition to their doctors’ attention or both. In a recent study, 45 per cent of patients said they had not consulted their doctor about their psoriasis in the preceding year. Several factors could contribute to this low consultation rate including decreasing concerns about physical appearance, poor previous experiences with treatments and low expectation of success.

Emotional and physical consequences
Psoriasis is not commonly fatal. Erythrodermic psoriasis can be fatal, but this is rare. Nevertheless, elderly people may be at higher risk of mortality due to co-morbidities or adverse events. Psoriasis is, for example, associated with an increased risk of non-melanoma skin cancer and lymphoma, especially in patients with more severe disease. It is unclear, however, whether this association arises from the disease, a side effect or both.

Other complications include psoriatic arthritis, which tends to be asymmetric and affects fingers and toes. Between five per cent and seven per cent of people with psoriasis develop psoriatic arthritis, although the prevalence reaches around 40 per cent in patients with extensive disease. Depression, anxiety and sexual problems are also common. Indeed, some patients with psoriasis show suicidal ideation. However, the association with severity is not linear — psychological problems may emerge among people with, objectively, less severe disease.

As these examples of the psychological burden suggest, psoriasis can markedly undermine HRQoL. Indeed, the impact is similar to other chronic diseases experienced by the elderly such as depression, myocardial infarction, hypertension, congestive heart failure or type 2 diabetes. Despite the decline in prevalence, there is no evidence that the impact on HRQoL lessens with advancing age. In a post hoc analysis assessing etanercept, no statistically significant differences emerged in the Dermatology Life Quality Index (DLQI) scores between elderly and young patients. Indeed, psoriasis may impose a greater burden on elderly people, according to a study of 936 patients hospitalised with the condition. Patients aged 65 years or older reported a greater impairment in their HRQoL than those less than 65 years of age on all domains of the Skindex-29 scale. (This scale is a reliable and valid self-administered instrument designed for measuring health related quality of life in dermatology. It consists of 29 items loading on three scales to measure the effects of skin conditions on symptoms, emotional state and social functioning. The questions refer to the previous four week period and scores are given on a five-point scale from ‘never’ to ‘all time high’. Higher scores indicate poorer quality of life.) Furthermore, older patients endured greater psychological distress. Older women, suffering from concurrent anxiety and depression showed the worst HRQoL.

While the potentially profound impact of psoriasis on HRQoL is well established, few studies...
Psoriasis imposes a heavy economic burden. Sixty per cent of UK patients with severe psoriasis took time off work in the previous year because of their condition. Furthermore, people with severe disease may require one or more hospitalisations each year. Each stay lasts for an average of 20 days and inpatient care costs, excluding drugs, total around £5,215 for each person. During 2003, doctors wrote nearly one million prescriptions for psoriasis therapies, which cost £27.8m. This excludes treatments used for other conditions (eg, corticosteroids or methotrexate) as well as costs arising from secondary and tertiary care and so markedly underestimates the cost. Clearly, optimising outcomes is important to limit the economic burden.

Primary care management
Clinicians need to counsel patients that psoriasis is incurable and ensure sufferers focus on improvements, rather than clearance. As only between 25 per cent and 30 per cent of patients have moderate (three to 10 per cent of body surface area) to severe psoriasis (>10 per cent) topical agents are the first-line treatment. GPs should also encourage patients to use emollients. However, patients should avoid emollients and other products containing lactic acid or alpha-hydroxy acid, which may irritate inflamed or broken skin.

Numerous studies show topical steroids (including betamethasone, mometasone and clobetasol) improve psoriasis. Indeed, doctors issued steroids to around 61 per cent of UK patients. Corticosteroid combinations and topical vitamin D analogues were each used by around 40 per cent of patients respectively. Just one in 50 patients used a systemic agent. The widespread use of steroids is testament to their efficacy and tolerability, although side effects may include skin atrophy, striae and tachyphylaxis, if they are used inappropriately. Concerns about side effects may lead some patients and physicians underdosing with topical steroids. However, as there is more understanding as to their nature, topical steroids are now available in a variety of potencies, strengths and formulations. This allows clinicians to tailor treatment according to the patient as well as differences in the sensitivity and thickness of the skin.

Vitamin D derivatives (eg, calcipotriol) normalise keratinocyte proliferation and differentiation. Calcipotriol is as effective as potent topical steroids, but may cause pruritus or burning. Hypercalcaemia is unlikely when used according to the label. Most reports of hypercalcaemia occurred in patients who received prolonged treatment with 200g or more weekly. The main side effect is irritation around the lesion, although few patients cease treatment as a result. Against this background combination therapy offers several benefits:

- used as a combination therapy, steroids and calcipotriol are more effective than either agent used alone;
- steroid lessens the irritation associated with calcipotriol;
- steroids act rapidly; calcipotriol may take up to six to eight weeks for full effects to emerge;
- applying topical treatments may be messy and time consuming, which may compromise compliance; using one formulation rather than two obviously reduces the time and mess.

Several formulations are available, including calcipotriol plus betamethasone dipropionate, which an analysis of UK prescribing habits found accounted for 41 per cent and 28 per cent of psoriasis scripts respectively. Calcipotriol plus betamethasone is a once daily treatment and can be used for up to four weeks, repeat courses can then be prescribed, if deemed suitable by the healthcare professional. If adequate doses of calcipotriol and steroids used in combination fail to produce an adequate response, patients may benefit from a trial of one or more topical therapies:

- topical retinoids (eg, tazarotene) normalises...
Dermatology

Psoriasis is not a geriatric disease per se. Nevertheless, this common skin disease imposes an increasingly heavy burden on middle-aged and elderly patients.

Key points

- The consensus among researchers suggests psoriasis arises from the interaction of multiple genes, immune dysfunction and environmental factors
- Elderly patients may be less likely than younger people to bring the condition to their doctors’ attention.
- Psoriasis arises from the interaction of multiple genes, immune dysfunction and environmental factors.

Phototherapy

Patients in whom the psoriasis involves more than 20 per cent of their body or who do not respond to topical therapy may benefit from UVB phototherapy and PUVA (a combination of the photosensitiser psoralen and UVA). To reduce the risk of skin cancer, the British Association of Dermatologists (BAD) guidelines (http://www.bad.org.uk/healthcare/guidelines/) suggest that patients should receive no more than 150 PUVA treatments over their lifetime. Furthermore, the need to visit a specialist centre two or three times a week can impose a significant time burden. Elderly people may also face transportation problems.

References


Systemic treatments

The BAD guidelines suggest using systemic therapies in the following circumstances:

- failure of an adequate trial of topical therapy;
- repeated hospital admissions for topical therapy;
- extensive chronic plaque psoriasis in the elderly or infirm;
- generalised pustular or erythrodermic psoriasis;
- severe psoriatic arthropathy.

In general, the BAD guidelines note, systemic therapy is appropriate when more than 10 per cent of the body surface area, the Psoriasis Area and Severity Index (PASI) score is greater than 10 or the DLQI is greater than 10. Nevertheless, systemic