

Considerations for the Clinical Assessment of the Patient With Plaque Psoriasis

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*A review of recently published data
with a commentary for managed care decision makers
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Psoriasis is a chronic, immune-mediated inflammatory disease of the skin (Pariser 2007). Its most common form, plaque psoriasis, presents as inflamed red lesions or patches of skin covered with a silvery white buildup of dead skin cells (Figure 1). Psoriasis affects both men and women equally, and while its onset may take place at any age, it typically appears in individuals between ages 15 and 25 (NPF 2009). The exact causes of the disease are unknown, although genetic, environmental, and immunologic factors are thought to influence an individual's susceptibility (Pariser 2007).

Because of the systemic nature of psoriasis, severity can fluctuate, ranging from a few lesions to numerous lesions that cover moderate or large areas of body surface (Krueger 2000). Psoriasis can affect many locations on the body, but tends to be more common on such areas as the lower back, elbows, knees, soles of the feet, and palms of the hand (NIAMS 2009). In clinical practice, the severity of the condition is formulated through an assessment of multiple factors, including body surface area (BSA) and lesion location, thickness, and severity, as well as through a subjective evaluation of the impact on a person's physical and mental statuses (Pariser 2007). This Clinical Brief will discuss some considerations for the clinical assessment of the patient with plaque psoriasis.

Diagnosis

Psoriasis is most often diagnosed through visual inspection. An assessment of the amount of BSA affected will assist in the determination of psoriasis severity. As a point of reference, a person's palm would be considered approximately 1 percent of BSA (NPF 2009).

Although there are no uniformly accepted definitions of psoriasis severity, the National Psoriasis Foundation (NPF)

defines mild psoriasis as affecting less than 3 percent BSA, moderate psoriasis as affecting between 3 and 10 percent BSA, and severe psoriasis as affecting more than 10 percent BSA (NPF 2009). Of the estimated 4.5 to 7.5 million Americans with psoriasis, nearly 25 percent have moderate to severe disease (Stern 2004, NPF 2009).

The severity of psoriasis can be measured by a number of factors, including the Psoriasis Area and Severity Index (PASI), an assessment tool used by researchers to determine psoriasis severity through the use of a grading system. The system consists of four criteria: redness, thickness, scaling, and the amount of surface area involvement (Fredriksson 1978). Other factors include physical severity and the disease's effect on a person's mental health and occupational status, as well as its impact on other components of a patient's life (Finlay 1995).

Variables exist when determining severity, however. For example, a patient may have less extensive BSA involvement, but if his or her face or dominant hand are affected, the disease may be considered to be of greater severity (Krueger 2000).

The impact of psoriasis on physical disability as measured by the Short Form Health Survey Questionnaire (SF-36), a non-disease-specific measure of health-related quality of life, has been shown to be comparable to that seen in other chronic health conditions (Rapp 1999). In this study, 317 patients with mainly mild (23 percent), moderate (67 percent), or severe (9 percent) psoriasis were assessed with the SF-36. Psoriasis patients reported reduced physical and mental functioning similar to that seen in patients with such conditions as arthritis, cancer, depression, diabetes, heart failure, and hypertension.

Although the research was conducted prior to the advent of biologic treatments, Krueger (2001) examined the psychosocial impact of psoriasis on individuals with severe disease. Among those who participated in an NPF telephone survey (N=6,194), patients with severe psoriasis ages 18 to 34 were more likely to report emotional difficulties stemming from their condition. Results of this survey also found that of this group, 75 percent said they felt unattractive, 54 percent reported feeling depressed, and 10 percent said they had contemplated suicide (Krueger 2001).

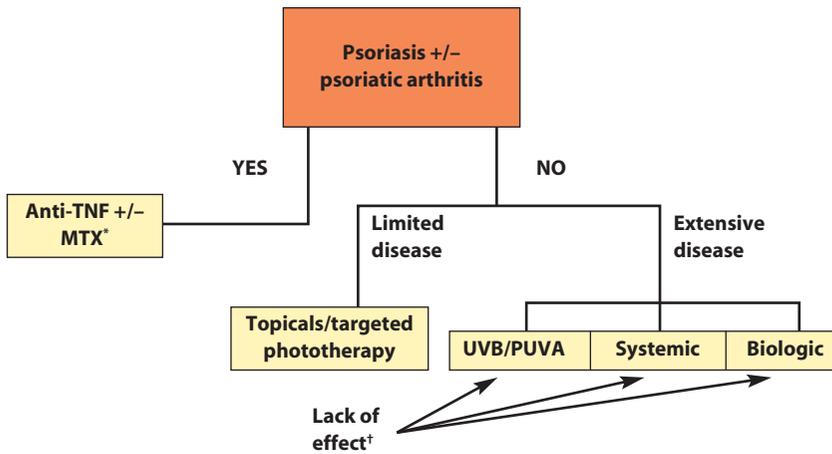
The occupational impact of severe psoriasis was examined in a British study of 369 patients (Finlay 1995). Of these individuals, 45.8 percent were currently working, 28.5 percent were not working, and 25.7 percent were retired. Of those patients who were employed, more than 59 percent had missed time from work during the past year as a result of their psoriasis (median number of days=20). Of those patients who were unemployed or retired, almost 34 percent attrib-

FIGURE 1
Plaque psoriasis
Scales located on the elbow



Source: ©National Psoriasis Foundation 2009

FIGURE 2
American Academy of Dermatology psoriasis decision tree



*Patients with nondeforming psoriatic arthritis without any radiographic changes, loss of range of motion, or interference with tasks of daily living should not automatically be treated with tumor necrosis factor (TNF)- α inhibitors. It would be reasonable to treat these patients with nonsteroidal anti-inflammatory agents or to consult a rheumatologist for therapeutic options.

†Patients with limited skin disease should not automatically be treated with systemic treatment if they do not improve, because treatment with systemic therapy may carry more risk than the disease itself.

MTX=methotrexate; PUVA=psoralen plus ultraviolet A; UVB=ultraviolet B.

Source: Reprinted from the *Journal of the American Academy of Dermatology*, vol. 58, Menter A, Gottlieb A, Feldman SR, et al. Guidelines for the care and management of psoriasis and psoriatic arthritis: Section 1. Overview of psoriasis and guidelines of care for the treatment of psoriasis with biologics, pg. 835. Copyright 2008 with permission from Elsevier.

asis depends on the type, location, and extent of the disease and include a variety of topical preparations, phototherapy, systemic therapy, and biologic agents (McCall 2008).

Although no uniformly accepted guidelines exist for physicians to follow when making therapy decisions, one set of guidelines for the care of the psoriasis patient has been published by the American Academy of Dermatology (Menter 2008). A working group of recognized psoriasis experts developed clinical recommendations based on the best available evidence graded using the following 3-point system: I. Good-quality patient-oriented evidence; II. Limited-quality patient-oriented evidence; III. Other evidence, including consensus guidelines, opinions, or cases studies (Menter 2008). The resultant treatment algorithm is shown in Figure 2.

In conjunction with this algorithm, AAD discussed seven additional general recommendations

uted their occupational status to their disease (Finlay 1995).

One additional factor pertaining to psoriasis that has been examined is the amount of time required to care for the condition (NPF 2006). NPF's spring 2006 survey reported highlights from interviews that were conducted with 405 patients with psoriasis and psoriatic arthritis by telephone (n=202) and online (n=203). Respondents were screened for a balance of age and gender, and 66 percent had moderate to severe disease. Of the respondents, 29 percent spent 30 minutes a day caring for their psoriasis, while 24 percent spent an hour or more doing so.

A European patient membership survey of 17,990 individuals with varying severity levels of psoriasis sought to determine patients' perspectives on their treatment and disease (Dubertret 2006). Survey participants' mean age of disease onset was 30.5 and the mean duration of disease was 23 years. Fifty-one percent of the participants were women. Half of all respondents reported that the time-consuming nature of psoriasis therapy was the most troublesome component of their treatment (Dubertret 2006).

Patient management

Many therapeutic options exist for the treatment of psoriasis, but none offers a cure. Treatment selection for psori-

for the treatment of psoriasis, summarized as follows:

1. Topical treatments are appropriate for patients who are candidates for localized treatment, but may not be practical as monotherapy for most patients, where traditional systemic treatments, including methotrexate (MTX), cyclosporine (CyA), narrowband and broadband ultraviolet B (UVB), psoralen plus ultraviolet A (PUVA), oral retinoids, and biologic agents are prescribed.

2. UVB is a safe, effective, and cost-effective treatment, although narrowband UVB is more effective than broadband UVB. Twenty to twenty-five narrowband UVB treatments, given 2 or 3 times a week, usually are needed to achieve substantial improvement. Other forms of UV exposure, such as sun exposure, may be beneficial to some patients.

3. PUVA therapy is very effective in most patients, with the potential for lengthy remissions. Long-term PUVA use in Caucasians may be associated with a heightened risk of squamous cell carcinoma and potentially malignant melanoma. Oral psoralen is contraindicated in pregnancy.

4. Although effective in most patients, MTX, an immunosuppressive agent, has the potential for hepatotoxicity and is contraindicated in pregnancy; cases of renal impairment; hepatitis or cirrhosis; alcoholic and unreliable patients; and

Managed Care Considerations

An Approach to Psoriasis Management

By Jeffrey J. Crowley, MD, FAAD, Bakersfield Dermatology and Skin Cancer Medical Group, Bakersfield, Calif., and Clinical Assistant Professor, University of California–Los Angeles

The past several years have seen the introduction of numerous new therapies for psoriasis. Our knowledge of psoriasis as a systemic disease has been greatly expanded, providing both new options and new concerns for our patients with moderate to severe plaque psoriasis.

Although much has been published on both new and existing therapies, the treatment of individual patients varies considerably. The primary therapies used to treat psoriasis are topical preparations, phototherapy, conventional systemic agents, and biologics. The degree of disease severity, patient preference, provider comfort level, insurance coverage, convenience, and previous treatment experience all contribute to therapeutic decisions.



Jeffrey J. Crowley, MD, FAAD

Severity of psoriasis can be quantified with measures of physical severity, such as the Psoriasis Area and Severity Index. These measures are used in clinical trials, but not generally employed in clinical practice. In assessing a patient in office, the paramount question becomes, “How much does the psoriasis affect his or her ability to

function in society and on a personal and social level?” For example, a patient with facial involvement but a low body surface area may be considered as having more severe disease (Krueger 2000). For these reasons, strict objective criteria for the use of systemic or biologic therapies may not be ideal for reasonable and effective therapy in our patients.

There are two additional considerations when treating psoriasis patients. Those with a high body

mass index (BMI) may not respond as well to some therapies as patients with normal BMI (Naldi 2008). Furthermore, patients whom we see in practice often have failed multiple previous therapies. Flexibility in treating these high BMI and treatment-resistant patients often is paramount to achieving success.

The pleomorphic nature of psoriasis, the variety of effective treatments, and patient preferences continue to make the treatment of psoriasis as much an art as a science.

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patients with leukemia or thrombocytopenia.

5. CyA also is immunosuppressive, and works rapidly and effectively for most patients. However, impaired renal functioning, hypertension, concerns regarding lymphoma, and a potential increase in cutaneous malignancies are known adverse effects following long-term CyA treatment.

6. Acitretin is not immunosuppressive, and is an effective systemic agent for psoriasis treatment. As a result of its teratogenic nature, however, acitretin should not be used in pregnant or breastfeeding women, or those who may become pregnant within 3 years of discontinuation. Dyslipidemia also may ensue and require a dose reduction or treatment with lipid-lowering agents.

7. At present time, biologic agents are an additional treatment option for plaque psoriasis. Biologics may affect T cell activation or target inflammatory cytokines. As these agents are immunosuppressants, there are important safety considerations associated with their use.

Prescribers should refer to the product information for each product for relevant safety information.

One additional consideration in the treatment of patients with psoriasis is body weight, as certain drugs are dosed by weight.

Conclusion

The assessment of a patient with psoriasis involves careful consideration of multiple factors. As no one treatment is appropriate for all patients, therapeutic strategies must be tailored to each individual and his or her clinical presentation.

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