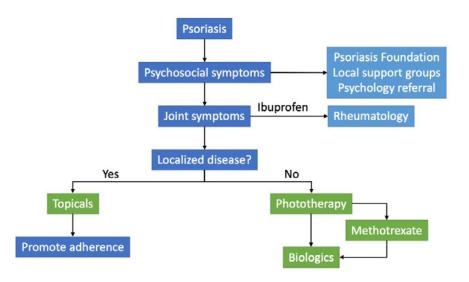
A Case-Based Roadmap for Improved Patient Outcomes in Plaque Psoriasis

CLINICAL INSIGHT

1. Introduction

Plaque psoriasis is a complex, inflammatory disease that has been associated with substantial patient burden. Psoriasis can lead to difficulty performing daily activities, such as sleeping, and embarrassment due to visible skin plaques. Managing psoriasis requires consideration of the psychosocial and physical disease burden, with stepwise management and referrals for psychosocial symptoms, joint symptoms, and skin disease.



2. Assessing Disease Severity and Treatment Response

Several validated tools are available to assess the severity of skin disease in plaque psoriasis. One of the most commonly used is Body Surface Area (BSA) affected due to the simplicity of use, but more comprehensive tools are available. For example, the Psoriasis Area Severity Index (PASI) quantitatively evaluates multiple domains of psoriasis plaques with excellent reliability. Once patients begin treatment, quantitative improvement in BSA and PASI scores can be used to determine whether they have responded to treatment. In clinical practice, a BSA of 1% or less or improvement in PASI score by more than 75% is considered a complete response, while change in PASI score of 50% to 75% is considered a partial response.

3. Biologic Switching

Patients with plaque psoriasis can have primary or secondary treatment failure. Primary treatment failure occurs when a patient's PASI score or BSA improves by less than 50%. Primary failure occurs when the patient initially fails to respond, while secondary treatment failure occurs when a patient initially responds to treatment but later becomes refractory. Secondary treatment failure is commonly caused by the development of antidrug antibodies; although, several other multifactorial causes can contribute to secondary treatment failure. Treatment approaches for patients with treatment failure should be individualized, but expert opinion generally dictates that primary treatment failure warrants switching to a treatment with a new mechanism of action. In contrast, secondary treatment failure is likely to respond to switching to a different agent within the same class.

4. Restarting Biologic Treatment

Patients may discontinue their treatments for a variety of reasons. Restarting treatment after discontinuation is generally associated with good outcomes—more than 60% of patients will recapture disease response. However, a proportion of patients do not achieve the same level of previous response. Lack of response after re-initiation of therapy has been shown to be slightly more common with infliximab, which is associated with a higher rate of antidrug antibodies than other agents. When restarting treatment, loading doses should typically be used if more than 3 or 4 half-lives of the drug have elapsed.

5. Plaque Psoriasis Comorbidities

Because of the ongoing, systemic, and localized inflammation associated with the disease, plaque psoriasis has been associated with several comorbidities. Cardiovascular disease and psoriatic arthritis are 2 common comorbidities in patients with plaque psoriasis. Psoriatic arthritis is of particular concern in patients with plaque psoriasis, due to the potential for irreversible joint damage without proper treatment. Nail lesions, such as those shown in the Figure, are a risk factor for PsA. Symptoms of psoriatic arthritis should be assessed at every appointment using a validated tool such as the Psoriasis Epidemiology Screening Tool (PEST).



Figure. Examples of nail pitting (A) and onycholysis leading to complete shedding of the nail (B). Images courtesy of Sobolewski P, Walecka I, Dopytalska K. Nail involvement in psoriatic arthritis. *Reumatologia*. 2017;55(3):131-135. <u>CC BY-NC-SA 4.0</u>.