






Diagnosis and Assessment of Psoriasis for the Rheumatologist: A Workshop From the GRAPPA 2024 Annual Meeting

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ABSTRACT. Rheumatologists and other nondermatologists often encounter patients with psoriatic arthritis (PsA) who present with cutaneous diseases that mimic psoriasis (PsO). Cutaneous disorders including tinea, seborrheic dermatitis, eczema, pityriasis rubra pilaris, syphilis, or cutaneous lymphoma are commonly mistaken for PsO. It is crucial for rheumatologists and other nondermatologists to recognize alternative conditions and to consider referral to dermatology when skin disease is not responding to therapy. Correct diagnosis is important when assessing disease severity in clinical practice as well. Although the Psoriasis Area and Severity Index (PASI) and the Dermatology Life Quality Index (DLQI) are gold standards for physician- and patient-reported outcomes in clinical trials, they are not practical to deploy in busy clinical practice. Use of a physician global assessment (PGA), body surface area using a handprint method, and informal patient-reported outcomes can be useful in documenting the burden of disease. A treat-to-target approach using a PGA of clear/almost clear is ideal. At the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) 2024 annual meeting, a 2-part workshop was conducted for rheumatologists to first review skin disorders commonly mistaken for PsO, and second, to review outcome measures best suited for clinical practice.

Key Indexing Terms: psoriasis, psoriasis severity scores, psoriatic arthritis, quality of life

Introduction

Psoriasis (PsO) is a chronic, inflammatory, immune-mediated systemic disease associated with multiple comorbidities.¹ Rheumatologists caring for patients diagnosed with psoriatic arthritis (PsA) often manage active psoriatic skin lesions, which is a common strategy given that therapies used by rheumatologists are usually effective for cutaneous PsO. However, many skin conditions resemble PsO, and input from dermatologists may be needed to treat patients in such cases. Dermatology consultation is the ideal next step, but the geographic availability and wait times for an appointment are barriers to specialty care. Therefore, it is important that rheumatologists and other nondermatology specialists have knowledge of skin disease diagnosis in order to prioritize care and assess therapeutic responses beyond joint symptoms. Strong collaboration between rheumatology and dermatology is ideal for the optimal management of patients with psoriatic disease (PsD).² Understanding which skin diseases to consider for differential diagnosis and when to refer to a dermatologist is crucial for patient quality of life (QOL).

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Key points for diagnosing PsO for the rheumatologist

Diagnosing PsO can be challenging for rheumatologists, primarily due to the diverse clinical presentations and overlapping clinical features with other skin conditions. In order to differentially diagnose and treat PsA when patients present with musculoskeletal symptoms, rheumatologists often rely on the presence of cutaneous PsO symptoms. A thorough understanding of the various cutaneous presentations of PsO and its mimickers is essential for accurate diagnosis and timely treatment of both PsO and PsA.

PsO generally presents as well-demarcated, scaling patches or plaques with varying degrees of discoloration (pink, red, violaceous, hyperpigmented), classically distributed on the extensor elbows, knees, and scalp. Plaque PsO is often categorized by distribution (eg, palmoplantar, scalp, inverse/intertriginous) or by phenotypic presentation (eg, “guttate,” characterized as < 1 cm papules usually presenting in the setting of acute infection). The degree of discoloration, scaling, and induration, as well as the distribution and area of involvement, vary enormously and overlap substantially with other papulosquamous conditions. Morphologies of other less common phenotypes, such as erythrodermic PsO, palmoplantar pustulosis, and generalized pustular PsO, add to the complexity of diagnosis. The Table shows a summary of common disorders that are mistaken for cutaneous PsO; images of various cutaneous conditions that mimic PsO are provided in Figure 1.³

PsO affects the nails in over 60% of patients with PsD, with 85% of patients reporting nail changes at some point of their life. Features of nail PsO are usually divided into 2 categories: nail matrix and nail bed PsO. Nail matrix findings include pitting,

Table. Differential diagnoses of skin diseases to consider according to their distribution.

Location/Phenotype	Cutaneous Disorders Commonly Mistaken for PsO
PsO vulgaris (plaque-type)	Pityriasis rosea, pityriasis rubra pilaris, cutaneous lupus erythematosus, secondary syphilis, tinea corporis, cutaneous T cell lymphoma/mycosis fungoides, pityriasis lichenoides chronica, atopic dermatitis/eczema, dermatomyositis
Scalp PsO	Seborrheic dermatitis, tinea capitis, dermatomyositis, lichen planopilaris, discoid lupus erythematosus
Inverse/intertriginous PsO	Tinea corporis/cruris, erythrasma, intertriginous candidiasis, seborrheic dermatitis, contact allergic/irritant dermatitis, Hailey-Hailey disease
Genital PsO	<ul style="list-style-type: none"> • Women: atopic dermatitis, contact allergic/irritant dermatitis, lichen sclerosus, lichen planus, squamous cell carcinoma in situ of the vulva (VIN), extramammary Paget disease, Zoon vulvitis • Men: irritative balanitis, Zoon balanitis, squamous cell carcinoma/Bowen disease, Erythroplasia of Queyrat, or extramammary Paget disease
Guttate PsO	Pityriasis rosea, secondary syphilis, drug eruption, parapsoriasis
Generalized pustular PsO	Acute generalized exanthematous drug eruption, autoimmune bullous diseases
Palmoplantar PsO	Atopic dermatitis/eczema including pompholyx, contact/irritant dermatitis, tinea manuum/pedis, pityriasis rubra pilaris, scabies, palmoplantar keratoderma

PsO: psoriasis; VIN: vulval intraepithelial neoplasia.

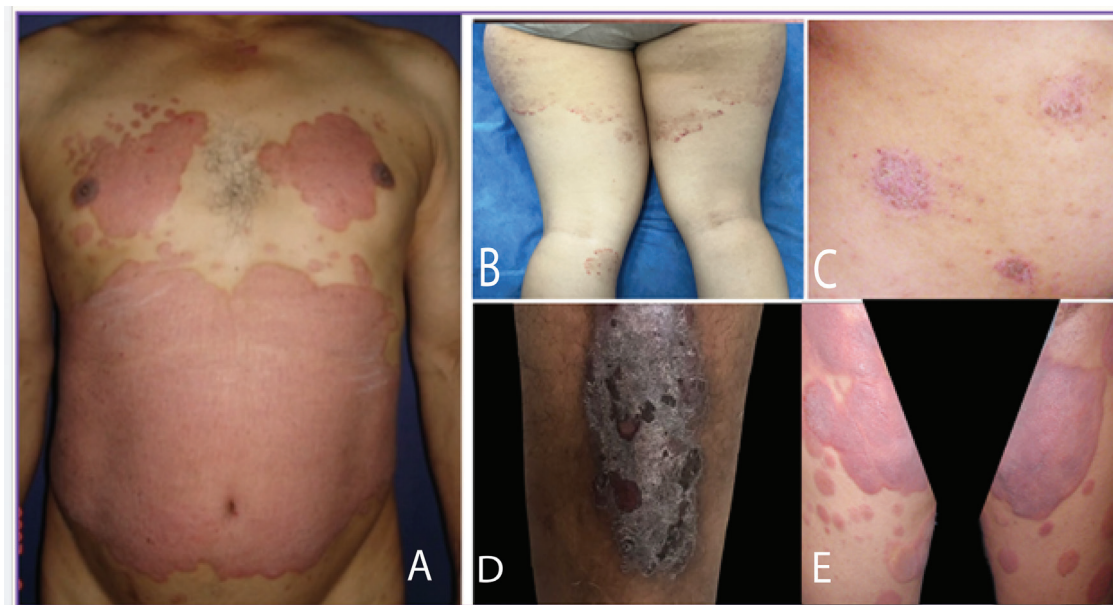


Figure 1. Images of psoriasis and cutaneous conditions that often mimic psoriasis. (A) Psoriasis. (B) Tinea. (C) Contact dermatitis. (D) Lichen simplex. (E) Cutaneous lymphoma. Figures extracted from the personal library of Dr. Manuel Franco and Dr. Juan Raul Castro Ayarza.

crumbling, red spots in the lunula, and leukonychia; nail bed findings include onycholysis, salmon patch dyschromia (also called oil spots), subungual debris, and splinter hemorrhages. No single finding is pathognomonic for PsO, and numerous other conditions share features of nail PsO. Nail PsO is commonly mistaken for dermatophyte infection of the nail (onychomycosis). Alopecia, atopic dermatitis, lichen planus, pityriasis

rubra pilaris, and numerous genodermatoses like pachyonychia congenita share features with psoriatic nail disease.⁴

Conducting a thorough skin examination is essential to assessing and diagnosing cutaneous PsO. It is important to ask the patient to disrobe to facilitate examination of common areas of PsO involvement that the patient may not volunteer, such as the scalp, body folds, genitals, and nails. Querying

the patient about their use of topical agents and response to systemic treatments during the examination can be very helpful. It is also important to keep in mind the patient may have > 1 diagnosis (eg, PsO and tinea) and that patients may not discern nonpsoriatic skin eruptions from PsO. If the clinical presentation is ambiguous or complex, or when patients are not responding to topical or systemic therapies, a dermatology consultation is recommended.

Optimizing assessment of severity of PsO in daily practice

There are numerous physician and patient-reported PsO severity outcome measures in use today. The 3 most common endpoints used to quantify PsO are the Psoriasis Area and Severity Index (PASI), physician global assessment (PGA; sometimes called an Investigator Global Assessment), and body surface area (BSA). Most industry-sponsored clinical trials of moderate to severe PsO require investigators to perform all 3; however, the use of these endpoints in clinical practice varies worldwide. Although the PASI is a highly validated instrument and widely used in most European countries, it is time consuming to perform and requires training to prevent interrater variability.^{5,6} Web and smartphone applications are available to calculate the PASI.^{7,8}

Most PGA instruments are 5- or 6-point tools that assess erythema, induration, and scaling. Although most PGAs are easy to perform, there is no widely accepted or validated PGA instrument for use in clinical practice. However, there is a strong correlation between PASI and PGA. An absolute PASI ≤ 2 and a PGA of clear/almost clear skin could represent appropriate alternative absolute treatment endpoints.⁹ In this way, PGA is useful for dermatologists or rheumatologists who wish to deploy a treat-to-target approach, where the goal is clear or almost clear skin (PGA 0 or 1). BSA is the only disease severity measure widely used both in clinical trials and practice, particularly in the United States where insurance dictates the use of this disease measure for prescribing biologics. BSA can be easily performed by any specialist by estimating the area of PsO involvement using the patient's full handprint as a guide (1 handprint approximately equals 1% of total BSA).^{10,11} Using both PGA and BSA and multiplying them together has been shown to be a valid surrogate for the PASI in clinical practice.¹²

Patient-reported outcome measures

The patient's voice is essential to assessing severity of PsO and its effect on QOL, health, and well-being. Patient-reported outcome measures such as the Dermatology Life Quality Index (DLQI) and the 36-item Short Form Health Survey (SF-36) are employed in clinical trials to assess how a skin disease affects patients' QOL, yet their use in clinical practice remains limited.¹³ Consensus exercises of the American Academy of Dermatology (AAD) and the International Dermatology Outcome Measures (IDEOM) group determined that the most preferred instrument for clinical practice is a 5-point PGA (scale 0-4; 0 = clear, 4 = severe).¹¹

Conclusion

In summary, managing PsD effectively is best done with a multi-

disciplinary approach integrating the expertise of dermatologists and rheumatologists. Rheumatologists may be the first specialists to evaluate a patient with PsD. Accurate diagnosis of PsO is crucial to diagnosing PsA. Given the myriad ways that cutaneous PsO may present, rheumatologists are encouraged to work closely with dermatologists to differentiate mimickers, assess disease severity, and evaluate the effect of disease on QOL in a busy clinical setting. The tools outlined herein aim to help the nondermatologist to optimize patient care. It is important to refer to dermatology early when the diagnosis of PsO is called into question or the skin is not responding to treatment. Strengthening partnerships and engaging in shared clinical decision making will ultimately improve outcomes and lessen the disease burden for patients.

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ETHICS AND PATIENT CONSENT

Institutional review board approval and patient consent were not required.

PEER REVIEW

As part of the supplement series GRAPPA 2024, this report was reviewed internally and approved by the Guest Editors for integrity, accuracy, and consistency with scientific and ethical standards.

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