A Comprehensive Assessment Tool for Psoriasis — An Unmet Need: Report from the GRAPPA 2014 Annual Meeting

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ABSTRACT. Psoriasis is a chronic inflammatory skin condition that has several distinct clinical subtypes, the most common of which is plaque psoriasis. Other non-plaque subtypes, however, including scalp, nail, inverse, and palmoplantar, have been demonstrated to be more common than previously believed, are associated with a significant burden of disease, and are likely underdiagnosed and undertreated. Understanding the effects of these non-plaque psoriasis subtypes can be challenging given that the gold standard psoriasis tool, the Psoriasis Area and Severity Index, is mostly directed at plaque psoriasis. Therefore, a tool that can more comprehensively assess the psoriasis patient represents an unmet need in dermatology. Herein we discuss the concept of an ideal tool that addresses both plaque and non-plaque subtypes, with equal contribution from physician and patient, as discussed at the 2014 Annual Meeting of the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA). (J Rheumatol 2015;42:1032–3; doi:10.3899/jrheum.150126)

Key Indexing Terms:
PSORIASIS PALMOPLANTAR PSORIASIS SCALP PSORIASIS
INVERSE PSORIASIS PSORIASIS INDEX PATIENT-REPORTED OUTCOMES

Psoriasis is a chronic inflammatory skin disease that is estimated to affect 1–3% of the global population[1]. Phenotypic subsets of psoriasis include plaque, scalp, nail, inverse, palmoplantar, and genital[1]. While plaque psoriasis is the most common subset, we have unpublished data suggesting that the other subtypes are more prevalent than previously believed. Moreover, our data indicate that it is common for individuals to display multiple psoriasis subtypes simultaneously.

It has been well established that plaque psoriasis is associated with severe life impairment; however, an increasing body of evidence shows that non-plaque psoriasis subtypes also carry a profound burden of disease[2,3,4,5,6,7]. Moreover, these subtypes result in life impairment that is out of proportion to body surface area involvement[1]. Therefore, it may be more challenging to understand the severity or effects on quality of life of the scalp, nail, inverse, or palmoplantar psoriasis subtypes.

Several methods exist to measure severity of disease in psoriasis. The Psoriasis Area and Severity Index (PASI) is currently the gold standard tool[8]; it does, however, have several important limitations. The PASI is most useful in the setting of plaque psoriasis but not as useful in measuring the severity of non-plaque psoriasis subsets[2,9,10,11,12]. Additionally, it does not include a patient-reported outcome (PRO) measure[9,10,11,12].

Other specific tools are designed to measure severity of specific psoriasis subsets, such as the Nail Psoriasis Severity Index, Psoriasis Scalp Severity Index, and the Palmoplantar Pustular Psoriasis Area and Severity Index[1,13,14,15]. However, these tools can be quite cumbersome and do not include a PRO component[1]. In light of new data indicating that other subtypes may be more common than previously understood and may commonly coexist, a tool that adequately assesses multiple subtypes is needed.

We recently introduced the Brigham Scalp, Nail, Inverse, Palmoplantar Psoriasis Composite Index (B-SNIPI)[1]. B-SNIPI measures the severity of non-plaque subtypes of psoriasis and weights PRO and objective physician assessment equally. The B-SNIPI questions corresponding to individual subtypes can be used in isolation or together, as appropriate[1]. The B-SNIPI represents an important complement to the PASI, and taken together, these 2 tools assess plaque psoriasis as well as other subsets of psoriasis.

Currently, no single instrument measures the global severity of psoriasis in a single patient, who may display

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more than 1 phenotype. Additionally, very few psoriasis severity tools include PRO.

We believe that the lack of a global assessment tool represents an unmet need in the psoriasis community. The ideal tool will comprehensively assess both plaque and non-plaque subtypes (scalp, nail, inverse, palmoplantar, and genital) and include equal input from patients and physicians (Table 1). Such a tool will optimize our ability to measure psoriasis severity regardless of phenotype, to understand the burden of disease in each patient, and to accomplish several important goals:

- Allow for the best patient care and increase communication and shared medical decision making
- Decrease rates of misdiagnosis and delayed diagnosis
- Allow access to systemic and biologic medications and clinical trials for patients with non-plaque subtypes, whose disease has been inadequately measured using previous severity tools.

Ultimately this tool will allow not only more complete understanding of patients with psoriasis, but also provide more thorough, efficient, and quality care to all patients with psoriasis.

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Table 1. The ideal global assessment tool to capture both plaque and non-plaque subtypes of psoriasis.

Suggested Items to be Measured	Comment	Examples of Appropriate / Suggested Measures
Plaque disease	Objective assessment including plaque quality, surface areas of involvement, and a global measure element	PASI or other objective novel plaque measure plus BSA
Patient-derived, patient-reported outcome of plaque disease	Should be patient-derived / weighted equally with an assessor measure	VAS-based PRO of plaque disease
Non-plaque disease	Objective assessment including lesion quality, surface areas of involvement and a global measure element	Measurement of scalp, nail, inverse, palmoplantar, and genital disease
Patient-reported outcome of non-plaque disease	Should be patient-derived / weighted equally with an assessor measure	Measurement of scalp, nail, inverse, palmoplantar, and genital disease

BSA: body surface area; PASI: Psoriasis Area and Severity Index; PRO: patient-reported outcome; VAS: visual analog scale.