Comment on "PGA×BSA composite versus PASI: Comparison across disease severities and as therapeutic response measure for Cal/BD foam in plaque psoriasis"

To the Editor: The product of the Physician Global Assessment (PGA) and body surface area (BSA) (PGA × BSA) is an important method whose time has come for standardized use in psoriasis.[1-4] PGA × BSA works well for patients with small BSA and is easy to use in practice, not just as a research tool. Although 80% of patients have mild to moderate disease, and the majority receive topical treatment, clinicians do not have simple, validated tools appropriate for this population.

Stein Gold et al[5] use this simple tool and compare PGA × BSA versus modified Psoriasis Area and Severity Index (mPASI) to evaluate a topical therapy and demonstrate the utility of PGA × BSA across a broad disease spectrum including mild to severe psoriasis.

The PASI is the standard criterion in trials and is insensitive in patients with mild disease. For example, a patient may have 4 severe, small plaques totaling 1% BSA in 4 different body zones (head, arms, trunk, and legs). Assuming a PGA score of 4 (exceptionally striking symptoms) with a BSA of 1%, the PGA × BSA would be 4. In the same patient, with the PASI, which does not differentiate between 1% and 9% BSA, the 4 body areas would be scored as 1 (less than 10% on each body site). Assuming erythema, induration, and scaling scores of 4 for the plaques on each site would result in a score of 12, a score sufficient to justify aggressive systemic therapy. Therefore, not only is the PASI cumbersome, but it could potentially be incorrectly inflated in patients with low BSA. In comparison, a patient with 4 severe plaques totaling 9% BSA in the same 4 body zones would have a PGA × BSA score of 36, or 9-fold higher, suggesting a degree of severity that might justify more aggressive therapy. The PASI score in the latter patient would still be only 12.

Thus, PGA × BSA is a useful measure in patients with low BSA. Evidence comes from Stein Gold et al's post hoc analysis[5] of data pooled from 3 studies of once-daily calcipotriol/betamethasone dipropionate foam *0.005-0.064%* (n = 649) or foam vehicle (n = 199) in 848 patients with psoriasis representing mild to severe disease with a mean mPASI of 7.3, mean BSA of 7.5%, and mean PGA × BSA of 22.6. Similar proportions of patients achieved 75% response for PGA × BSA and mPASI, and both were significantly greater than vehicle ($P \leq .002$). The strength of the relationship between PGA × BSA and mPASI, per Spearman correlation, depended on disease severity. The PGA × BSA and mPASI correlations were higher with increasing psoriasis severity, with correlations at baseline of $r = 0.51$, 0.72, and 0.86, respectively, in mild (n = 126), moderate (n = 465), and severe (n = 58) psoriasis. The lower correlation in patients with mild disease should not be surprising.

Raising awareness about PGA × BSA as a tool for use in patients with mild disease can benefit clinicians. PGA × BSA provides more detailed information at lower disease severities, is an easier tool for practitioners, and offers clinicians a potentially more accurate therapeutic efficacy assessment tool than 75% reduction in PASI score in patients with mild disease.

In sum, Stein Gold et al's post hoc analysis[5] is an example of how PGA × BSA should be considered the standard for patients with less than 10% BSA involvement.

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