Acne Global Severity Scale

A recent review article reported finding at least 25 scales for assessing the global severity of acne.[1] That so many scales exist indicates a lack of consensus on this issue and that no one scale is considered to be the "gold standard." Some authors have even substantially modified their own proposed scales.[2,3]

A Consensus Conference, convened by the American Academy of Dermatology in March of 1990, identified the primary difficulty in developing a universal scale as being the "pleomorphic" nature of acne as pertains to mixture of lesion types and sites of involvement, the variable characteristics of inflammatory lesions and the variability in the natural history of acne lesions.[4]

Different scales have had different emphases, including on lesion types (e.g. inflammatory lesions only) and on use of photographs (e.g. forming the basis of the scale, photographic technique). While individual lesion counts have often been employed in the investigational setting, their practicality and value for use in the clinical setting have been questioned.[5]

Unlike lesion counts, however, a universally-accepted global severity scale might have both clinical and investigational application. In the clinical setting, a standardized scale might aid in therapeutic choices and serve as an objective basis for assessing response to treatment. In the investigational setting, a standardized scale might enhance consistency across centers in the determination of baseline disease status and in the assessment of response to study treatment. For practitioners and investigators alike, a standardized scale could serve as an objective basis for interpreting published results from individual clinical trials as well as comparing results from different trials.

Attributes of an ideal global scale would include:

- A limited number of levels so as not to be too cumbersome and impractical for use.
- Levels which are sufficiently described so as to limit intra- and inter-observer variability.
- Levels which indicate when treatment is no longer needed or when maintenance therapy is undertaken e.g. "clear" (no acne) or " almost clear."
- Static measures to reflect a point in time.
- Universality for clinical and investigational use.
- A high degree of correlation with lesion counts.

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[1]Lehmann HP et al. Acne therapy: a methodologic review. J Am Acad of Dermatol 2002;47:231-240.
[2]Burke BM, Cunliffe WJ. The assessement of acne vulgaris-the Leeds technique. Br J Dematol 1984; 111:83-92.
[3] O'Brien SC, Lewis JB, Cunliffe WJ. The Leeds revised acne grading system. J Dermatol Treat 1998; 9:215-220.
[4] Pochi PE et al. Report of the consensus conference on acne classification. J Am Acad of Dermatol 1991;495-500.
[5] Pochi et al.,495.

An example of an acceptable global assessment scale is:

0 = Normal, clear skin with no evidence of acne vulgaris

1 = Skin is almost clear: rare non-inflammatory lesions present, with rare non-inflamed papules (papules must be resolving and may be hyperpigmented, though not pink-red)

2 = Some non-inflammatory lesions are present, with few inflammatory lesions (papules/pustules only; no nodulo-cystic lesions)

3 = Non-inflammatory lesions predominate, with multiple inflammatory lesions evident: several to many comedones and papules/pustules, and there may or may not be one small nodulo-cystic lesion

4 = Inflammatory lesions are more apparent: many comedones and papules/pustules, there may or may not be a few nodulo-cystic lesions

5 = Highly inflammatory lesions predominate: variable number of comedones, many papules/pustules nodulo-cystic lesions