Rethinking the classification of alopecia areata

To the Editor: From the late 1800s[1] to the recent revision of the World Health Organization's *International Classification of Diseases-10th revision*, the alopecia areata (AA) spectrum of disease has been classified as AA (patchy alopecia), ophiasis (occipitotemporal alopecia), alopecia totalis (AT; complete scalp alopecia), and alopecia universalis (AU; complete scalp and body alopecia). This classification scheme is only vaguely descriptive of the clinical spectrum of disease, with the majority of presentations being classified as AA. As a result, there is little correlation between subtype and prognosis. Indeed, ophiasis and the AT/AU subtypes are associated with a poor prognosis, but they comprise a minority of cases.[2] Most presentations ranging from mild to severe scalp hair loss, with good and poor prognoses, respectively, are classified under a single subtype, AA.

Considering the emergence of Janus kinase inhibitors for the treatment of AA and the large clinical trials in progress (ie, NCT03570749, NCT02299297, NCT02974868, and NCT03137381), it is time to rethink the classification of AA. The validated Severity of Alopecia Tool (SALT),[3] used to calculate an AA severity score (0%-100%, no hair loss to complete scalp hair loss), is an essential instrument of clinical studies of AA because it is an objective estimation of hair loss. We propose that AA-spectrum disease simply be classified as AA with two additional qualifiers, a SALT score and the presence or absence of body involvement (complete or incomplete loss of body hair). This simple classification is straightforward and avoids individual judgments, such as whether or not several hundred scalp hairs means a patient does not have at least AT or if, in the same patient, the presence of sparse hair on a leg means the patient does not have AU. In the latter example, the patient has AA with SALT score 99% and incomplete body hair involvement.

Further classification of AA-spectrum disease follows the objective calculation of SALT score. While there seems to be consensus that a SALT score ≥50% constitutes severe AA, further categorization of disease will be important, ie, mild, moderate, etc. Such categorization is likely to be based on patient/expert consensus, which will be informed by functional data (eg, AA surface area that can be reasonably treated with intralesional injections) and other considerations.

Owing to increased understanding of AA pathogenesis,[4,5] we have entered the era of targeted treatment, and so our assessment of AA-spectrum disease should evolve. We need to move beyond thinking of AA as patchy disease versus complete scalp hair loss versus complete scalp and body hair loss and sharpen our assessment, beginning with the evaluation of scalp hair loss using the SALT score (with complete or incomplete body hair involvement) and then devising categories that have both clinical and prognostic value. The immediate importance of this is for uniformity of assessment across clinical trials. Thinking beyond trials, there may be subtle pathophysiologic differences for which emerging treatments may be tailored to ranges of SALT scores. Lastly, payers are certain to adopt AA severity scales based on the SALT score, further highlighting the need to sharpen our assessment of the AA spectrum.

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REFERENCES

1. Déhu P. Pelade. In: Besnier E, Brocq L, Jacquet L, eds. *Dermatological Practice: Treatise on Applied Dermatology*. volume 3 [in French]. Paris: Masson et cie; 1904: 647-714.
2. Safavi KH, Muller SA, Suman VJ, Moshell AN, Melton LJ. Incidence of alopecia areata in Olmsted County, Minnesota, 1975 through 1989. *Mayo Clin Proc*. 1995;70:628-633.
3. Olsen EA, Hordinsky MK, Price VH, et al. Alopecia areata investigational assessment guidelines—part II. *J Am Acad Dermatol*. 2004;51:440-447.
4. Kennedy Crispin M, Ko JM, Craiglow BG, et al. Safety and efficacy of the JAK inhibitor tofacitinib citrate in patients with alopecia areata. *JCI Insight*. 2016;1:e89776.
5. Xing L, Dai Z, Jabbari A, et al. Alopecia areata is driven by cytotoxic T lymphocytes and is reversed by JAK inhibition. *Nat Med*. 2014;20:1043-1049.

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