How I Do It

Timothy Carman, MD, FISHRS *La Jolla, California, USA* tcarmanmd@ljhr.com

As hair transplant surgeons, we routinely refer to the Norwood-Hamilton scale in assessing and categorizing hair loss patterns during the initial patient consult. Below, Dr. Muhammad Ahmad proposes augmenting this assessment scale to include a more detailed examination of the changes observed in the temporal areas as a result of male pattern hair loss (MPHL). This article further serves to remind us that hairline reconstruction necessarily should include reconstruction of temporal and lateral hump losses to attain a natural appearing result. If you have a suggestion or tip you employ in your practice that you would like to share with your peers in the ISHRS, please feel free to email me at tcarmanmd@ljhr.com for publication in our journal.

Ahmad's NPRT System: A New Classification System for Documenting Male Pattern Baldness

Muhammad Ahmad, MD, FISHRS *Islamabad, Pakistan* plasticsurgeon999@yahoo.com

A majority of men experience varying degrees of hair loss in their life span.[1] With increases in the overall population, the total number of men with baldness will continue to increase. There have been a few MPHL classifications described in the literature. The first attempt was in 1950 by Beck et al. in white male patients, and again in 1951 by Hamilton et al. in white and Chinese populations.[2,3] Today, the "gold standard" is the Norwood-Hamilton classification presented in 1974.[4] Differences in the patterns described in these scales may be due to environmental changes, climate changes, racial differences, dietary factors, etc.[5] As noted by Hamilton, the basic cause of baldness in men is the androgenic hormones combined with genetic predisposition and age.[6] Many genes are thought to be responsible for male pattern baldness. The varying degrees of baldness patterns may be due to genetic changes or the expressive combination of the genetic materials from different races as a process of evolution, which may result in change in expression of these genes.

The Norwood-Hamilton classification has some limitations. It puts more emphasis on vertex classification, while the temporal regression is not fully discussed. To address the limitations, a few other classifications have been developed. Bouhanna developed a multifactorial classification.[9] These classifications were based on the study of Caucasians of different ages. The basic and specific pattern (BASP) classification was developed by Lee et al. in the Asian population in 2007.[10] In our opinion, the BASP classification has various points that are difficult to memorize. We feel that in spite of claims to the contrary, it is more complicated and has limitations as well. BASP has not achieved worldwide acceptance mainly due to its complexity, but also due to lack of practical descriptive terms required for the physician in clinical practice, and it does not encompass the full variety of patterns. BASP terms are difficult to reconcile with Norwood scale descriptions.[11] Similarly, temporal points have also been classified by Brandy et al. and Mayer et al., but these have not been incorporated in the Norwood scale.[12,13] Some patterns are classified as "non-specific," and other classification systems have described less common patterns of baldness.[7-9] With more than a decade's experience, the author has attempted to develop a new classification system, improving the "gold standard" and adding certain details to the points not mentioned in Norwood's original classification.

Proposed Classification

The new classification is comprised of four points:

1. Norwood Classification

The Norwood grades serve as the main part of the classification and the types remain as I to VII and variants as IIIa, IIIv, IVv (Figure 1).
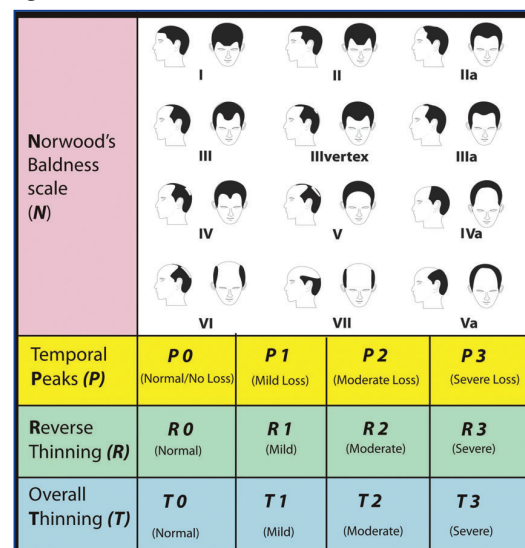

Figure 1. Ahmad NPRT Classification System

2. Temporal Peaks/Points

Denoted by the letter "P." The different grades are being proposed from 0 to 3 with the letter P (Figure 2).

P0 indicates "No" hair loss at the temporal points.

P1 indicates the temporal point (apex of the peak) is located not less than the junction of one-third and two-thirds of the distance between the outer canthus to tragus.

P2 denotes the temporal point is located not less than one-half of the distance between the outer canthus to tragus.
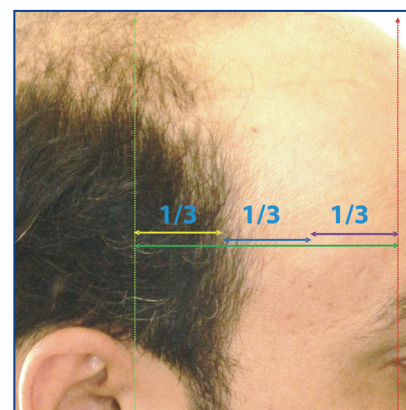

Figure 2. Temporal points/peaks (P)

P3 denotes the reverse of P1; that is, the temporal point is located at the distance less than two-thirds and one-third between the outer canthus to tragus.

3. Reverse (or Retrograde) Thinning

This is denoted by the letter "R." It is the hair loss in the occipital area and above the ears (mastoid area). This may occur combined with loss of peaks (Figure 3). The following grades are proposed. (Reverse thinning means that more skin is visible than hair.)

R0 denotes no reverse thinning.

R1 indicates mild reverse thinning; that is, the density is decreased considerably and is limited only to 1cm above the ears and/or lower occipital area.

Figure 3. Reverse thinning (R)

R2 indicates moderate reverse thinning; that is, the hair loss/decreased density is more than 1cm but less than 2cm.

R3 indicates severe reverse thinning and involves the decrease in density/hair loss more than 2cm above the ears and/or above the line joining both ear lobes.

4. Overall Thinning (The degree of thinning in the balding area)

This is denoted by the letter "T" (Figure 4).

T0 indicates no thinning.

T1 indicates mild loss in density (less than 25%); that is, more hair is visible than skin.

T2 indicates moderate loss in density (more than 25% but less than 50%); that is, more skin is visible than hair.

T3 indicates severe loss of density (more

Figure 4. Overall thinning (T)

than 50%); that is, a much larger amount of skin is visible than hair.

The density can be measured at the level of external occipital protuberance. The density of 90 hairs/cm^2 is taken as normal.

The classification system presented addresses all of the lacking issues in the previous classifications. It seems to be less complicated and can be easily memorized. It maintains the "gold standard" to which various points are added. The Norwood scale is mentioned and these three points are expressed in brackets, for example, type VI (P1, T2, R2) or VI (P2, T0, R0), etc.

Conclusion

This proposed addition to the current system is relatively simple and helps further describe common hair loss patterns. Future multicenter studies would be beneficial to evaluate its effectiveness in documenting temporal hair loss patterns in males across a larger clinical population.

References

1. W.P. Unger, and R. Shapiro, eds. *Hair Transplantation,* 4th Edition. Marcel Dekker Inc.: New York; 2004.
2. Beek, C.H. A study on extension and distribution of the human body hair. *Dermatologica.* 1950; 10:317.
3. Hamilton, J.B. Patterned loss of hair in man: types and incidence. *Ann NY Acad Sci.* 1951; 53:708-728.
4. Norwood, O.T. Male pattern baldness; classification and incidence. *Southern Med J.* 1975; 68(11):1359-1365.
5. Bas, Y., et al. Prevalence and types of androgenetic alopecia in north Anatolian population: a community-based study. *J Pak Med Assoc.* 2015; 65(8):806-809.
6. Hamilton, J.B. Male hormone stimulation is prerequisite and an incitant in common baldness. *Am J Anat.* 1942; 71:451-480.
7. Savin, R.C. *Evaluating Androgenetic Alopecia in Male and Female Patients.* Kalamazoo, MI: The Upjohn Company; 1994.
8. Cohen, B.H. The hair loss profile and index. *J Cosmet Dermatol.* 2002; 15:19-23.
9. Bouhanna, P. Multifactorial classification of male and female androgenetic alopecia. *Dermatol Surg.* 2000; 26(6):555-561.
10. Lee, W.S., et al. A new classification of pattern hair loss that is universal for men and women: basic and specific (BASP) classification. *J Am Acad Dermatol.* 2007; 57(1):37-46.
11. Kim, J.Y., et al. Characteristics of nonbalding scalp zones of androgenetic alopecia in East Asians. *Clin Exp Dermatol.* 2015; 40(3):279-285.
12. Brandy, D.A. A method for evaluating and treating the temporal peak region in patients with male pattern baldness. *Dermatol Surg.* 2002; 28(5):394-400.
13. Mayer, M.L., and D. Perez-Meza. Temporal points: classification and surgical techniques. *ESHRS Journal.* 2003; 3(2):6-7.◆