

Effective Therapeutic Option in the Treatment of Androgenetic Alopecia

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Men and women experiencing hair loss see their future as uncertain and painful. For some, hair loss and the overall appearance of their hair becomes an overriding obsession. In a study, it was found that the proportion of men with moderate to extensive hair loss (type 3 or greater) was 42%.¹ The proportion of men with moderate to extensive hair loss increased with age, ranging from 16% for men aged 18 to 29 years to 53% of men aged 40 to 49 years.¹ Even with this extensive prevalence, many people do not seek treatment with hair loss products because of cost, little hope of effectiveness, or lack of convenience.

For physicians whose practices encompass cosmetic dermatology, the fact that there are only a few effective products available with proven efficacy to treat androgenetic alopecia (AGA) has limited the ability to successfully treat this vexing condition in a nonsurgical manner.

There is another effective therapeutic option available, the HairMax LaserComb laser phototherapy device. Recently, results of a pivotal clinical trial of the HairMax LaserComb that provided clear evidence of efficacy and safety to the US Food and Drug Administration have been published in the May 2009 issue of the peer-reviewed journal *Clinical Drug Investigation* in the article "HairMax LaserComb Laser Phototherapy Device in the Treatment of Male Androgenetic Alopecia: A Randomized, Double-blind, Sham Device-Controlled, Multicentre Trial."² The study population included males aged 30 to 60 years with a diagnosis of AGA with a Norwood-Hamilton hair loss classification of IIa to V and Fitzpatrick skin type I to IV.

Of 110 participants who completed the study, those in the HairMax LaserComb treatment group exhibited a significantly greater increase in mean terminal hair density

than participants in the sham device group ($P < .0001$).² Consistent with this evidence for primary effectiveness, significant improvements in overall hair growth were demonstrated in terms of patients' subjective assessment ($P < .01$) at 26 weeks from baseline.²

The conclusions of the study suggested that the HairMax LaserComb is an effective, well-tolerated, and safe laser phototherapy device for the treatment of AGA in males.² Studies on the use of the device in females is ongoing.

The HairMax LaserComb is a home-use, class 3R laser phototherapy device that contains a single-laser module that emulates 9 beams at a wavelength of 655 nm, with a variation of 5 nm. The device uses a patented "teeth" mechanism of parting the user's hair by combs that are attached to the device to improve delivery of the laser energy to the scalp.

The laser energy emitted by the HairMax LaserComb is hypothesized to increase the biological molecule, adenosine-5'-triphosphate, which in turn increases cellular metabolism and cellular activity. The hair follicle then has the building blocks and energy to transform a weakened follicle to one that is healthy and capable of producing thick, terminal hair. In turn, the enhanced environment invigorates the hair follicle, which produces healthier hair, prevents further hair loss, and stimulates the regrowth of thicker terminal hair.³

The results of this study provided conclusive evidence for the first time of efficacy of a phototherapy device for hair growth, and the HairMax LaserComb should now be considered as first line therapy for the treatment of appropriate males with AGA.

References

1. Rhodes T, Girman CJ, Savin RC, et al. Prevalence of male pattern hair loss in 18-49 year old men. *Dermatol Surg.* 1998;24(12):1330-1332.
2. Leavitt M, Charles G, Heyman E, et al. HairMax LaserComb laser phototherapy device in the treatment of male androgenetic alopecia: a randomized, double-blind, sham device-controlled, multicentre trial. *Clin Drug Investig.* 2009;5:283-292.
3. Data on file. Lexington International, LLC. ■

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