

Alopecia

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Essential oils and low-intensity electromagnetic pulses in the treatment of androgen-dependent alopecia.

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This double-blind randomized study vs placebo in healthy male and female volunteers demonstrates the positive biologic effect on hair loss and hair regrowth of a pulsed electromagnetic field in combination with essential oils administered according to a regular treatment schedule of 26 weeks. Mean hair count comparisons within the groups significantly favor the treatment group, which exhibited a decrease in hair loss in 83% of the volunteers and a more than 20% hair count increase over baseline in 53% of patients. The process exhibited no side effects or untoward reactions. The histologic examination correlated with the clinical study. A parallel immunohistochemical examination showed an increase in the proliferation index, and when the expression of Ki67 (a cell proliferation marker) is increased, the mitoses are barely visible in the histologic examination. The rationale of this phenomenon is considered to be due to an electrophysiologic effect on the quiescent hair follicle.