A Comparative Study between Topical Minoxidil and Systemic Finasteride in Treatment of Female Pattern Hair Loss

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Introduction & Objectives

Female pattern hair loss (FPHL) is the most common type of hair loss, affecting approximately 50% of women older than 40 years.

Women with hair loss are more likely to have a lowered self-esteem and lowered quality of life than men. Comparison of the efficacy and safety of topical minoxidil 5%, topical minoxidil 2 % and systemic finasteride 1 mg in treatment of female pattern hair loss.

Patients and Methods

Study included 80 patients with history of female pattern hair loss (FPHL) of more than one year duration. Patients were divided randomly into 4 treatment groups and each patient received treatment for 6 months, group (A) topical minoxidil 5% (n=20), group (B) topical minoxidil 2% (n=20) and group (C) systemic finasteride 1 mg daily (n=20) and lastly group (D) topical placebo (alcohol 10%) (n=20). Efficacy was evaluated by Ludwig's grade of frontal hair thinning, patient selfinvestigator's and assessment assessment.

Results

Both 5% and 2% topical minoxidil showed more statistically significant difference than placebo in promoting hair growth in women with FPHL. Consistent statistical advantage of 5% topical minoxidil over 2% topical minoxidil was not demonstrated. The highest prevalence of drug-related adverse events of a dermatologic nature (such as pruritus, dermatitis, dryness, scaling) were showed with placebo, followed by minoxidil 5% then minoxidil 2%. Finasteride was no more effective than placebo except in slowing down hair loss. Oral finasteride was well tolerated by the women without evidence of systemic adverse effects except breast tenderness and menstrual irregularity.





Conclusion

Daily applications of minoxidil 5% or minoxidil 2% were found to be more effective than oral finasteride 1mg in treatment of FPHL.

Recommendations

- ☐ Further studies should be performed to a better understanding of the minimal finasteride effective dose as well as to predict non-responder patients.
- Greater efforts are needed to classify women accurately into appropriate subsets for which this treatment option may be beneficial.
- ☐ Long-term adverse effects are also a fundamental concern.