HAIR DISORDERS

MINOXIDIL 1 MG ORALLY VERSUS MINOXIDIL 5% SOLUTION TOPICALLY FOR TREATMENT OF FEMALE PATTERN HAIR LOSS: A RANDOMIZED CONTROLLED TRIAL

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Introduction: Topical minoxidil is the only FDA approved treatment for female pattern hair loss (FPHL). Many patients discontinue treatment prematurely due to lack of efficacy or intolerance.

Objective: To compare the efficacy, safety and tolerability of minoxidil 1 mg orally versus minoxidil 5% solution applied topically in the treatment of FPHL.

Methods: A 24-week, prospective, randomized, open, parallel, comparative, evaluator-blinded study conducted from January-2017 through March-2018 including 52 women (18-65 years old) with FPHL. Patients were randomly assigned to receive once daily minoxidil 1 mg orally or once a day minoxidil 5% solution applied topically. The primary endpoint was the change from baseline in nonvellus target area hair count at week 24. Secondary endpoints were global photographic assessment by three group-blinded evaluators, hair shedding score, and the Women's Androgenetic Alopecia Quality of Life Questionnaire (WAA-QoL).

Results: After 24 weeks of treatment, both groups showed improvement in hair density in the target area ($p < 0.01$), but with no difference between groups: oral 13.3% and topical 7.4% ($p=0,81$). There was also no difference in the assessment of overall photographic improvement ($p=0.16$) and WAA-QoL score variation ($p=0.09$) between groups. The reduction in the hair shedding score was more pronounced in the oral group ($p < 0.01$). The side effects were mild. Hypertrichosis was more prevalent in the oral group (27%) than in the topic (4%). Heart rate (HR) increased 10% in the oral group ($p<0.01$), but not in the topic. No patient had HR greater than 96bpm. There was no difference in mean arterial pressure between the groups ($p=0.51$).

Conclusions: Oral 1mg minoxidil was safe and well tolerated in the treatment of female pattern hair loss. Its efficacy did not differ from topical 5% minoxidil solution, in a 24 weeks evaluation. It can be an option for intolerant patients to topical therapy.