



HAIR DISORDERS

INTEREST OF AN ANTI-HAIR LOSS SHAMPOO SUPPLEMENT USED ALONE AND IN ASSOCIATION WITH THE REFERENCE TREATMENT IN THE MANAGEMENT OF HAIR LOSS.

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Introduction: Reactional and chronic hair loss affect men and women impairing quality of life. Topical Minoxidil® effectiveness in hair loss was demonstrated in numerous studies. However, it's necessary to enhance its hair follicles bioavailability.

Objective: Our laboratory developed a hair loss supplement shampoo promoting hair growth used alone, and potentiating Minoxidil® when used together.

Materials and Methods: 2 studies were performed. The first assessed shampoo inherent benefits in hair loss management. 45 women with acute telogen effluvium were enrolled in a 12-week opened controlled study (3 times a week application). Phototrichogram, pull tests and macrophotographs assessed anti-hair loss property. The second investigated difference of Minoxidil® in vitro penetration through hair follicles, after topical application with and without shampoo pre-treatment. Skin penetration study was realized at finite conditions (10µl/cm²), on human scalp, 10 and 30 min after Minoxidil® application. Scalp was mounted on dynamic cells using radiolabelled compounds. 3H-Minoxidil® was quantified by scintillation counting in skin.

Results: First study showed a significant increase in anagen hair count and a significant decrease in telogen hair count after 6 and 12 weeks. Moreover, the anagen/telogen ratio significantly increased: 61% (6 weeks) and 74% (12 weeks) versus baseline. This stimulating effect was confirmed by hair pull test with a significative decrease of number of collected hairs: 19% (6 weeks) and 38 % (12 weeks). Finally, macrophotographs also confirmed the inherent benefits of shampoo in acute telogen effluvium. Second study demonstrated that after 10 and 30 min, significant higher quantities of Minoxidil® were recovered into hair follicles after pre-treatment with shampoo (1.41µg against 0.29µg





without shampoo).

Conclusion: Altogether, results show the interest of using a stimulating shampoo alone in hair loss management. They also evidence the enhancing effects on Minoxidil® penetration into scalp and hair follicles, making it an efficient complement in anti-hair loss treatment.

