



HAIR DISORDERS

INTRADERMAL INJECTIONS OF A NOVEL INDIGENOUS HAIR GROWTH FACTOR FORMULATION FOR ENHANCEMENT OF HUMAN HAIR REGROWTH – SAFETY AND EFFICACY EVALUATION IN A FIRST IN-MAN PILOT CLINICAL STUDY

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Background: Research has shown the efficacy of growth factors in hair regrowth. We describe the intradermal scalp injections of a novel, indigenously invented, recombinant, hair formulation, containing specific growth factors, for enhancement of hair regrowth & evaluate its efficacy.

Objectives: The objective of this study was to assess the efficacy & safety of the said formulation, in reducing hair loss & enhancing hair growth.

Disclosure: US patent awarded to our formulation recently.

Materials & methods: This was an open label, prospective, single arm interventional pilot study, in which 1000 patients were given intradermal scalp injections of a hair formulation containing

Vascular Endothelial Growth Factor, Basic Fibroblast Growth Factor, Insulin like Growth, Keratinocyte Growth Factor, Thymosin β 4 & Copper tripeptide 1. Injections were given every 3 weeks, for 8 sessions. Hair pull test was performed, before every session. Videomicroscopic & global images were taken at baseline, fourth and eighth session, & 2 months later.

Results: Significant reduction in hair fall was seen in 83% patients, on hair pull test. Videomicroscopic image evaluation showed that most patients had a decrease in the number of vellus hairs, increase in number of terminal hairs & increase in shaft diameter. 75% patients believed that injections were aiding the treatment of their hair loss.





At one year, a statistically significant increase in total hair count ($P=0.002$) continued to be seen.

Treatment was well tolerated.

Conclusions: Intradermal injections of this hair formulation may be a promising option for treating male and female patterns of hair loss.

