

Investigating the effect of a moisturizing skin booster using the DermaLab Hydration Probe

A collaboration between Cortex Technology and Dr. Pablo Naranjo from Elite Laser Clinic

Introduction

The aim of this paper was to evaluate the hydrating effect of Volite skin booster injectable using the DermaLab Hydration Probe.

Skin hydration is influenced by factors such as water, salts, humectants, and emollients in the outermost skin layer, stratum corneum (1). Retention of water in stratum corneum is dependent on three key mechanisms: the barrier function provided by intercellular lipids, the structural organization of corneocytes, and the presence of natural moisturizing factors within the skin (2).

Volite is a skin injectable by Juvéderm based on hyaluronic acid. Juvéderm claims that the product improves skin hydration through binding and retaining of water molecules, with an effect lasting up to 9 months (3).

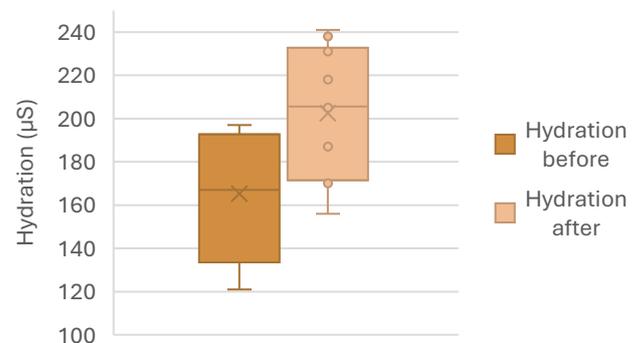
Methods

Ten participants aged 29 to 61 years were enrolled and received a Volite skin boosting treatment. Hydration measurements were performed in the temporal area using the DermaLab Hydration Probe both before and after approximately 12 weeks after the treatment.

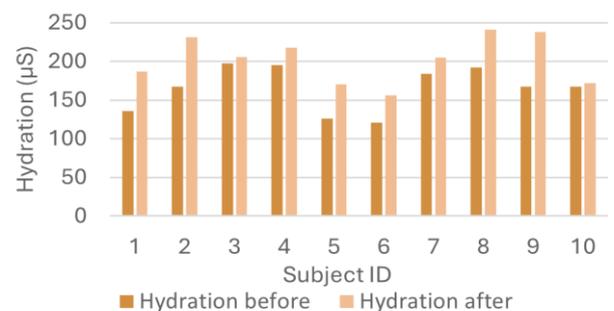


Picture lent from Dr. Kremneva Private Clinic at <https://www.kremnev.lv/en/injections/juvederm-volite/>

Hydration before/after treatment



Individual hydration before/after treatment



Results and discussion

Hydration measurements demonstrated an increase in hydration levels in all participants following treatment. Furthermore, a statistically significant difference was observed between pre-treatment and post-treatment groups (paired T-test, $p < 0.001$).

Conclusion

The results demonstrate that the Cortex Hydration Probe effectively can visualize and quantify skin hydration levels. Furthermore, the results indicate a consistent hydrating effect associated with the Volite skin booster.

The DermaLab Combo

Is highly customizable and provides advanced measurements. Choose between 12 probes and combine up to 9 skin parameters in one device.

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Niels Jernes Vej 6B
9220 Aalborg
Denmark
+45 9857 4100
cortex@cortex.dk
www.cortex.dk

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Niels Jernes Vej 6B
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+45 9857 4100
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