CASE STUDY

Skin sebum, elasticity, TEWL and hydration

Measuring the effect of acne treatment and vitamin B on skin hydration and elasticity



Case information

Study Title: Evaluation of biophysical skin parameters and hair changes in patients with acne vulgaris treated with isotretinoin, and the effect of biotin use on these parameters Published in: International Journal of Dermatology (2021)

Authors: S. E. Aksac; S. G. Bilgili; G. O. Yavuz; I. H. Yavuz; M. Aksac; A. S. Karadag Aim: The study aimed to investigate the effects of a 4-month isotretinoin acne treatment on skin sebum, elasticity, trans-epidermal water loss (TEWL), and hydration, as well as the impact of vitamin B treatment in patients undergoing isotretinoin therapy.

Solution and method

The study included 60 patients with moderate-to-severe acne divided equally into group A and group B. Both groups received isotretinoin treatment for four months, and patients in group B additionally received vitamin B treatment. Skin sebum level, TEWL, hydration and elasticity were measured before and after the treatment period using the DermaLab Combo probes. The Derma-Lab Combo provided non-invasive measurements of the skin parameters.

Results and conclusions

The use of DermaLab Combo probes enabled the study to precisely and reliably demonstrate the effects of isotretinoin on the skin, revealing a reduction in skin sebum, elasticity and hydration. The study additionally identified the beneficial role of Vitamin B in supporting skin hydration during treatment.

BENEFITS of the DermaLab Combo

Objective, reliable data:

The DermaLab Combo probes offer immediate and accurate assessments of skin parameters, delivering objective and reliable data essential for this study.

Non-invasive measurements:

The device features sturdy and noninvasive probes which allows for repeated measurements without harming or altering the skin barrier. This ensures high comfort and efficient workflows.

Versatility:

The DermaLab Combo combines skin hydration, trans-epidermal water loss (TEWL), skin color and elasticity measurements along with ultrasound imaging, making it a highly versatile and advanced device. This establishes the DermaLab Combo as an invaluable tool for both dermatological research and cosmetic efficacy studies.



The DermaLab Combo

Is highly customizable and provides advanced measurements. Choose between 11 probes and combine up to 9 skin parameters in one device.





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