

## Ultrasound

Evaluating the effect of collagen injections as treatment for sun-induced skin aging



### Case information

*Study title:* Clinical efficacy of intradermal type I collagen injection in treating skin photoaging in patients from high-altitude areas

*Published in:* World Journal of Clinical Cases (2024)

*Authors:* B. Yang; A. He; B. Bu; G. Zhu et al.

*Aim:* To evaluate the efficacy and safety of type I collagen injections for sun-induced skin aging by measuring post-treatment changes in skin thickness and density.

### Solution and method

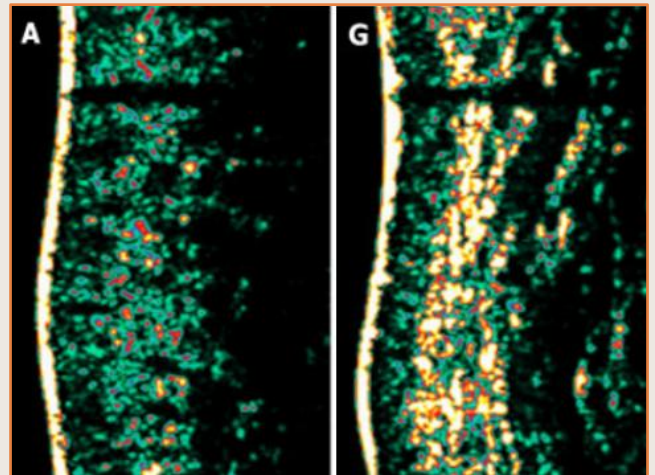
The study included 20 participants with signs of sun-induced skin damage. The participants received collagen injections six times at 4-week intervals. The injections were applied on the cheeks, forehead and around the eyes.

Objective assessments were performed with the DermaLab ultrasound probe, providing skin thickness measurements and cross-sectional visualizations of the epidermis and dermis following each treatment session.

### Results and conclusions

Use of the DermaLab ultrasound probe enabled the study to generate reliable data supporting the positive effect of the collagen injections. The study concluded that facial collagen injections may provide a minimally invasive approach to restore dermal collagen content and thickness.

Please note: Cortex devices provide objective measurement data for research and cosmetic studies. They are not intended for diagnosis or treatment of medical conditions.



Cross-sectional images of skin layers captured using the DermaLab ultrasound probe. Brighter areas in the images represent regions of higher skin density. Image A was taken prior to treatment initiation, while image G was taken after the sixth treatment session. The comparison suggests a positive effect of the treatment on skin density (Yang et al., 2024).

## BENEFITS

### of the DermaLab Ultrasound Probe

#### Skin density analysis for advanced cosmetic testing:

The DermaLab ultrasound probe measures skin thickness and density, making it ideal for assessing skin rejuvenation products like collagen injections.

#### Non-invasive measurements:

The device provides non-invasive measurements and visualization of skin layers, allowing for repeated measurements without harming or altering the skin barrier. This ensures high comfort and efficient workflows.

### The DermaLab Combo

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

To learn more about our solutions, visit [cortex.dk](https://www.cortex.dk)



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