



MEMO 9/20

ACS-CorneoTherapie

The Difference makes the Difference

In October 2020 we added to the abbreviation **ACS** (**A**dvanced **C**ell **S**timulation) the term "CorneoTherapy". With this choice of words, or this play on words, if you will, "ACS-CorneoTherapy" should be clearly differentiated from the commonly used term "microneedling".

This delimitation mainly concerns the needle lengths used in microneedling, up to 3 mm, and the uncontrolled delivery of devices via the Internet to any person. The internet is full of negative examples and abuse of needle devices, be it needle rollers or modified pigmentation devices. Today, microneedling is burdened with a negative image and meets with skepticism and rejection even from seriously interested circles. The images of bleeding faces on the internet are daunting. Treatment with needle lengths over 1 mm causes pain and requires anesthesia of the skin with numbing creams. (Their time to become active is approx. 45 minutes and only reduces pain by 30%).

Needle lengths from 2 to 3 mm are so painful that local anesthetic injections, intravenous sedation or general anesthesia must be used. The use of these nonsensical needle lengths has also been promoted by clinical trials for the treatment of hypertrophic scars and burn scars. The authors of these studies are of the opinion that the TGFs (Transforming Growth Factors) circulating in the blood are attracted by "rigorous and aggressive" needling. This results in profuse bleeding and long-lasting bruises. What was overlooked is the fact that keratinocytes in the epidermis stimulate these TGFs and other cytokines when they come into contact with very short needles (<0.5 mm). Although this fact has long been known, there are still believers in these long-needle-devices who are mistaken for this belief.



Innovations up to the technical maturity of miniaturization take time, often many years.

On the **left** a needle roller from the early days of needling - on the **right** the result of 20 years of research. The stimulation of corneocytes and keratinocytes alone is the secret of success.



ACS

The treatment of the skin with the smallest possible arrays requires basic knowledge of the skin's anatomy and the physiological processes it triggers. This knowledge is imparted to all interested parties in a training course.

After 20 years of research, we now know that improving the appearance of the skin, from wrinkles and scars to pigmentation disorders and other skin problems, can be treated exceptionally successfully with needle lengths in the range from 0.2 to a maximum of 0.5 mm. These facts have not only been proven and confirmed by pathologists and examinations in the gene sequencer, but also proven in practice with countless examples by before- and after images.

(<https://youtu.be/TG3jLZcZ8tY> <https://youtu.be/YlfhOVZzwa0> <https://youtu.be/M1IA6doV1uE>)

We are particularly grateful to our customers in France for these excellent results. Pictures speak more than 1000 words. The vast majority of our customers are beauticians who have passed a state-recognized examination. Before purchasing the device, it is mandatory that the purchaser has taken part in theoretical and practical training for ACS-CorneoTherapy. This concept has proven itself extremely well and separates the wheat from the chaff in the so-called anti-aging industry.

Corneotherapy

The term Corneotherapy was coined by the US-dermatologist Professor A.M. Kligman. To be precise: Kligman focused his attention solely on the stratum corneum and its care. Kligman saw the causes of all skin diseases in a no longer intact stratum corneum. He developed cosmetic formulations for the prevention and protection of the top layer of the skin. His favourite was "Petrolatum". The latest scientific findings paint a more nuanced picture.

Research in recent years has shown that the cause of the penetration of pathogens through the stratum corneum into the epidermis and the underlying dermis is more likely to be found in a defective filaggrin network. (Pro-)Filaggrin are proteins (more precisely: peptides) that are expressed by keratinocytes and corneocytes. Our experience suggests that after ACS-Corneo therapy, this filaggrin deficiency is more than compensated for by a significant increase in new keratinocytes of around 300%. A strengthened stratum corneum ultimately also benefits from this increase.

Today we definitely know that the finest micro-arrays already express messenger substances in the layers of the keratinocytes and corneocytes that trigger the skin's natural repair mechanism and thus stimulate positive physiological processes. This results in a significant improvement in scars, striae, pigment problems, etc.

For the reasons mentioned, it was obvious we coined the term: "ACS-CorneoTherapy", according to the motto:

"The Difference makes the Difference"

Friesenheim/Alsace, September 2020
Horst Liebl

PS: Far more and detailed information you can obtain from the book "The Magic Needle"

Website www.acs-pen.com >>