

What's the **Secret** of advance anti-aging?

A variety of treatments have been introduced to prevent aging skin for years, but RF SECRET is a relatively new technology based on micro-needle system using RF energy. The length of the needle ranges from 0.5mm to 3.5mm, which allows practitioners to apply a wide range of spectra in their treatment and the adjustability of the intensity of RF energy enables treatment in different areas of the body. Past experiences have shown that this technology is very effective in such diverse applications as wrinkles, skin laxity, pore tightening and scars as well as stretch mark treatment. The histological picture shows the production of new collagen breakdown enzymes in two weeks of the initial treatment. Dr. Juri Kirsten, a dermatologist in Berlin, reported on his experience in the use of the RF SECRET in medical treatment.

Micro-needle Fractional Radiofrequency, Secret®

for facial and body treatment

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What is the SECRET?

Needs for maintenance of a natural, firm and tight skin without use of fillers or Botox injections have always been present in patients. Furthermore, treatments should not cause side effects and involve pain. Many patients are actually unable to afford comfortable day-offs or leaves due to their jobs, which makes them hard to seek for a surgical treatment. To cope with such difficulties, we have succeeded in coming up with an appropriate alternative.

The RF SECRET will promise us all types of treatments including micro-needle and mesotherapy, and RF treatment, which are not new but have all already been used in the clinics.

Lasers have so far been used to improve the texture of the skin and visually achieve skin regeneration effects. Unfortunately, these methods resulted in damage to the epidermis and long recovery periods enough for patients to seek for time off from their job, which has made them avoid such treatments. In addition, they more often than not present with such side effects as infections and scars. However, we have performed micro-needle treatment and brought about good results, where repetitive treatments play an important role, as collagen can be formed only through mechanical stimulation.

Now, we are able to trigger the production of new collagen from the dermis using the RF SECRET. It enables practitioners to perform treatment without causing damage to the skin, reducing the need of the patients for taking time off from their jobs, and what is better still, is available all through the year.

How does the SECRET work?

Treatment deep in the dermis without leaving any damage to the skin becomes possible by way of the time delay of radio frequency in the RF SECRET. The needles are designed to be punched in the skin and pulled out immediately at a rate of 1:1000 second. RF stimulation is made for an interval of a few thousandths of a second to stop thermal damage after they are pressed into a desired affected area. The needles are kept in a cold state while they are in the skin. They are adjustable in a range of 0.5~3.5mm, which allows the practitioner to perform treatment depending on the medical signs and conditions of skin areas. The coagulation in the dermis caused by heat stimulates the secretion of new collagenase, which will in turn activate collagen and fibroblasts for a long time. The secondary treatment is performed, where the depth of needles are changed to obtain both deep dermis and superficial epidermis stimulation effects. It takes a total of one hour to provide treatment to a patient. Lidocaine cream is applied to reduce the pain that may occur during treatment. The face may become reddish after treatment, which will disappear in at least 24 hours. It is recommended that three treatments should be performed with an interval of two months between applications.

What are the advantages?

A Few competitive instruments have been available on the market since this product has used a relatively new technology. As we are concerned about the possibility of the residue of an alloy being deposited inside the skin, it is important that needles must be non-insulation. Also, the need for continuous treatment requires reasonable medical bills.



Figue1. Necorsis inside deep dermis

How is clinical result?

We are very pleased to see most patients are satisfied with the treatment. Only one patient among 30 who have received treatment failed to feel any difference in the look of the skin. According to our experience, there have been cases in which some patients were a little satisfied or little satisfied, when it comes to a medical instrument. However, it was very encouraging to see old patients experience reductions of wrinkles with the progress of treatment, even from the first application.

Especially, the effectiveness in treatment of scars can be noteworthy. Two patients who had received treatment developed swelling the next day; however, it was a normal condition and nothing to worry about that may manifest itself in the course of treatment.

We sent the tissue samples of the patients to our laboratory and could obtain evidence that collagen breakdown had already progressed in two weeks later. (Refer to Figure 1 and 2.)



Figue2. New Collagen breakdown enzyme in two weeks of treatment

RF SECRET allows practitioners to not only apply micro-needle fractional RF but also provide the possibility of mono-polar treatment. Use of mono-polar RF frequency for maintenance of a firm and supple skin in addition to a combination of two methods has brought about good outcomes to our patients. Patients who had visited our clinic had good knowledge about this new trend by means of the Internet; that is why it is very important for me, as an expert in anti-aging medicine, to keep up with the times in terms of recently available treatment methods.



