COMBINATION OF IPL AND RADIOFREQUENCY FOR TOTAL SKIN REJUVENATION. PILOT STUDY

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INTRODUCTION

The skin ageing is associated with loss of its elasticity, and depends on genetic and environmental factors. Under certain climatic conditions, UV radiation may be responsible for most of the changes observed in the ageing process, which is called photoageing. The solution in regards to the issue described above are devices based on radio frequency (RF) and IPL used for years to improve the elasticity of the face and neck skin, thereby delaying the signs of ageing, reducing pigmentation and vascular changes. In practice, the thoughtful selection of the right devices and their parameters is important, which results in the success of treatment to meet the expectations of todays demanding customers.

AIM

THE AIM OF THIS PILOT STUDY WAS TO ASSESS THE SAFETY AND EFFICACY OF COMBINED FACE FACIAL THERAPY USING THREE TECHNOLOGIES: IPL SMART PULSE, RF (MP) 2 AND RF NANOFRACTIONAL SMART SCAN TO ALLOW US TO COMPARE RESULTS WITH CO2 LASER IN CLINICAL STUDIES IN FUTURE

MATERIAL AND METHOD

- The group of 6 patients (males and females) aged 30-65 volunteered for a consultation during which full consultation and a thorough analysis of the their skin concerns was carried out, patch tests were carried out on each of the applicators used.
- At the same time, it was determined that in the case of no adverse reactions, 7 days after the consultation TriBella protocol based treatment can be initiated.

TREATMENT PROTOCOL

- Venus Versa device was used.
- The TriBella protocol was used according to the manufactures guidance:
- - IPL SR515, IPL SR580 applicators in SmartPulse technology to reduce pigmentation and vascular changes, at the same time to strengthen collagenogenesis, firm the skin and reduce wrinkles;
- - RF + PEMF (MP) 2 applicator DiamondPolar ™ for strengthening collagenogenesis, firming the skin, smoothing visible wrinkles and stimulating fibroblast proliferation and angiogenesis;
- - RF Nanofractional SmartScan ™ applicator used for stimulation of keratinocyte proliferation, skin tightening and toning.
- The duration of the session : about 1.5 hours, with 10 minutes breaks between individual applicators.
- During the consultation, the skin phototype was determined according to the commonly used Fitzpatrick scale
- Before the session, Glogau scale was used to determine photoaging grade

STUDY PROTOCOL

- Patients were divided into two groups:
- First group has received one treatment
- Second group has received three treatments with 4 week intervals
- The patients were qualified for the procedure while not reporting any contraindications. The treatment was performed by one of the investigators.
- Pictures were taken before the treatment and 3 weeks after the last treatment. The improvement of face skin parameters was assessed independently by the investigator and a group of 10 evaluators on a scale of 1-5 where 1 means no visible effects of therapy, and 5 - excellent effects of improvement skin condition.
- Evaluators were asked if they noticed following skin improvement
- Improvement in laxity
- Improvement of the face contour
- Improvement in wrinkles
- Improvement of skin tone
- Reduction of widened pores
- To keep the evaluators blind, no information was given about the participants, the technology, or the chronology of the photographs and asked to put them in order : before and after.
- During the ongoing treatment, the patients were asked to report subjective feelings during the procedure assessed in the VAS 0-10 scale, where 0 means - I do not feel anything, and 10 means - I feel pain that I can not stand. The client was asked to give her opinion 3 weeks after the procedure on a scale of 1-5 where 1 meant - I do not notice the difference, I am dissatisfied with the effect 2 - I am not satisfied with the effects of the treatment – 3- I am moderately satisfied with the effects of the treatment, 4 - I am satisfied

RESULTS

The results obtained through the assessment of a group of 10 experts in the field of cosmetology based on photodiaphaphic documentation:

- Significant improvement in laxity- 100%
- Improvement of the face contour- 95%
- A significant improvement in wrinkles- 95%
- Improvement of skin tone- 100%
- Significant reduction of widened pores - 95%
- 90% experts - defined the result of therapy on a 5-point scale as 5.
- 10% experts - described the result of therapy on a 5-point scale as 4 as a satisfactory.
- **4,5% overall score**



before



after 1 TriBella Treatment



after 1 TriBella™ treatment



after 3 TriBella™ treatments

cONCLUSIONS:

Non-invasive methods of skin rejuvenation are more and more often performed procedures in aesthetics. At the same time, evidence- based medicine references shows the safety of the therapy of individual methods.
The use of combined intense pulsed light (IPL) therapy, various types of radio (RF) waves, including those containing PEMF and RF NanoFractional, turned out to be extremely useful in anti-ageing interventions.
Pilot study presents excellent results of firming, rejuvenating, lightening the skin and reducing wrinkles with a small convalescence time.
Synergistic stimulation of keratinocytes and fibroblasts at the postmodern reduction of pigment and vascular lesions allows for long-lasting, satisfactory results achieved after just one treatment.
Nevertheless, according to the researchers' assessment, the described TriBella treatment protocol shows further research in a wider group of participants to confirm effectiveness.
After the analysis of the pilot study, it can be unequivocally concluded that the therapy used is a great surgical alternative with a wide range of efficacy for people who do not want to decide on injection methods, as well as for those who want to apply the broadly understood anti-ageing prevention. The natural capabilities of the organism resulting from the immune response to microdamages caused by IPL light, radio waves or RF RF nanofractional are enhanced, which ensures long-lasting post-treatment results.

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