COMBINATION OF DEEP NON ABLATIVE RADIOFREQUENCY WITH MULTISOURCE FRACTIONAL RF SKIN RESURFACING FOR THE TREATMENT OF DEEP WRINKLES AND ATROPHIC ACNE SCARS

Monica Elman MD(1), Ido Frank BSc(3), Hila Cohen BSc (3) Yoram Harth MD (2,3), [1] Beit Harofim Holon, Israel [2] Medical OR, Medical Center, Herzlya, Israel. [3] EndyMed Medical Ltd. , Caesarea, Israel

Background:

Effective treatment for deep wrinkles or atrophic acne scars requires treatment of both epidermis – for roughness and hyperpigmentation and dermis - for collagen remodeling. First generation radiofrequency systems (one RF generator) allow non-ablative RF treatment while a few others allow simple bipolar Fractional RF skin resurfacing. A new type of FDA cleared therapy system (EndyMed PRO, EndyMed Ltd., Cesarea, Israel) uses for the first time phase controlled **multisource** RF for both deep (11mm) non ablative RF and fractional RF skin resurfacing on the same treatment device.

Methods:

Ten subjects (9 females and one male) with deep wrinkles or atrophic acne scars were enrolled in the study. Ages range was 21 to 72 years (average: 37.2). Patients were photographed using standardized methods. In each treatment session, each patient received a full face 3DEEP non ablative skin tightening treatment followed by a Fractional skin resurfacing treatment. The treatment session were repeated once a month to a total of 2- 4 treatments.

Fig. 1 : Baseline ((Lt.) and after (Rt.) four combined treatment. Significant decrease in area and depth of depressed acne scars.





Fig.2: Baseline ((Lt.) and after (Rt.) 4 combined treatment. Significant decrease in area and depth of depressed acne scars, improvement of skin texture and elimination of post acne hyperpigmentation.





Results:

All subjects experienced mild-moderate edema and erythema as an immediate response to treatment. Edema resolved after up to three hours post treatment and erythema lasted up to 2 days. Micro ablative crusts lasted up to 5 days. Patients photographs, before, after 4 weeks and 8 weeks were graded according to the accepted Cosmetic Improvement Scale. At the end of treatment sessions 55% of the patient said they would definitely recommend the treatment to their friends. One months and three months after the end of treatment the percentage of patients willing to recommend the treatment rose to more than 80%. Physician assessment of the results showed in thirty percent of patients improvement of 26-50% while the other seventy percent had an improvement of 51 - 75%.

Conclusions:

In this study we tested a new protocol that uses the EndyMed ProTM, $3DEEP^{\textcircled{R}}$ technology that for both deep non ablative RF delivery and Fractional skin resurfacing on the same treatment session. The results show a significant improvement in depressed acne scars and pigmentation, with minimal pain and downtime and a very high physician and patient satisfaction.

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