Reduction of photo- and chronoageing wrinkles through changed microcurrent lots (MLM)

Valeria Dente, Simona Ruggiero, Gabriella Calabrò, Fabio Ayala

Department of systematic pathology Division of clinic, allergologic and venerologic dermatology Università degli studi di Napoli Federico II (Director: Prof. Fabio Ayala)

The skin ageing is a phenomen caused by both intrinsic causes (chronoageing) and extrinsic or environmental ones (photoageing) (1,2); several medical and surgical remedies have been proposed to reduce its effects.

According to this, we have valued an electromedical device efficay generating changed microcurrent lots (MLM) (Pic 1, Rugalift ®), 6KHz of frequency, it acts on the wrinkles caused by chrono and photoageing.

Twenty patients have been enlisted (W 19; M 1) with an age between 30 and 65 years. The exclusion criteria have been; the exposure to sunlight and UV artificial source, recent chemical peeling, infectious disease, allergic contact dermatitis because of nickel, pacemaker bearers. During each sitting the microelectrodes have been applied on the wrinkles of forehead, around the eyes, on the furrows around the nose and on the upper lip for a time of 20 - 30 seconds. For each patient 3 week's sittings with a total time of 12 sittings have been applied. Before the treatment the Skin Age Score (3) has been calculated and the instrumental probes have been conducted (sebo and horny measurement and TEWL assessment). The treatment efficacy evaluation has been supplied with documentary photos taken: before the treatment (t0), 30 minutes after the treatment (T1), after six sittings (T2; 15 days), at the end of the treatment (T3).

Among 20 patients, 17 have concluded the treatment and 3 have given up because of personal reasons.

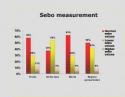
The 53% of the patients were between 41 and 50 year, 35% between 51 and 60, those ones between 61 and 65, 30 and 40 represented respectively the 4% and 8% (Pic 2). According to the patients' anamnesis it has been found that the 50% of the enlisted patients smokes, the 54% of the women is in menopause, the 75% of them uses sun filters, the 21% undergoes UV sunlamp treatments; furthermore, according to the Mass Body Index (MBI) estimate the 50% of the patients has a normal weight, the 42% is over weight and the 8% is obese. The horny measurement values have revealed that the 38% of the patients have a normally moisturized skin and the 62% of them have a dehydrated one (Pic 3).

The data concerning the sebo quantity are included in the normal limits in each area of examination, execept from the nose's one where there are lower values (Pic 4). In the figures 5-10 there are some examples of the clinical results taken thanks to the electromedical device. Each patient who has concluded the treatment it's been possible to notice a reduction of the wrinkles' depth, above all in the patients who show more evident ageing signs.



Age arrangement 30-40 41-50 51-60 61-65













Pic.5. 1st patient, before the treatment

Pic.9. 3th patient, before the treatment



Pic.10. 3th patient, after the treatment

- Bibliography.

 1. Ayala F. Fotoinvecchiamento. In: Santoianni P e Monfrecola G Fotodermatologia. Ed. CIC Roma 2003: 55-64

 2. Gilchrest BA. Skin aging 2003: recent advances and current concepts. Cutis (2003) 72: 5-10

 3. Guinot C et al. Relative contribution of intrinsic vs extrinsic factors to skin aging as determined by a validated Skin Age Score. Arch Dermatol (2002) 138: 1454-60