Efficacy evaluation of a Dermocosmetic with Skin Repair Properties after Fractional Laser Surgery in Acne Scars

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INTRODUCTION
Acne scars are the cause for a significant morbidity among dermatology out-patients.1 Insights in the potential of fractional laser treatments have established standard laser procedures to treat acne scars.2 Non-ablative fractional 1565 nm laser therapy is indicated in the reduction of pore size, acne scars, wrinkles and photoageing. However, it also causes a series of changes in skin and soft tissues, such as erythema, swelling, pain, burning and other discomfort.3, 4 The recovery period and potential side effect of post fractional laser may be important, post-laser care using dermocosmetics (DC) is highly indicated to increase the outcome of laser procedures.5, 6

OBJECTIVES
This study evaluated the clinical efficacy and safety of a DC balm in the skin repairing process after fractional laser therapy in acne scars.

RESULTS
Subjects were aged between 24 and 50 years with a mean age of 39.5±8.6 years. The control group (40.03±12.65 years) was somewhat older than the DC balm group (38.76±14.09 years). 14 days after the procedure, the total effective rates of the DC balm and the control group were similar (97.6% and 92.9%, respectively). Conversely, the TEWL in the DC balm group was significantly less important than in the control group (14.9±3.4 g•m⁻²•h⁻¹ vs 22.3±4.0 g•m⁻²•h⁻¹, p<0.001); a significant improvement was observed as early as after 7 days (Figure 1). After 7 and 14 days of use, the erythema and melanin index were significantly (all p<0.05) lower in the DC balm than in the control (Figure 2).

CONCLUSION
The post-laser application of a specifically developed dermocosmetic balm for 14 days improves skin hydration, reduces procedure-related complications, and promotes the early recovery of skin damage after fractional laser operation of acne scars.

References

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