

Evaluation of the effects of a cosmetic treatment based on the secretion of *Cryptomphalus aspersa* (SCA®) after the use of ablative fractional CO₂ laser in cutaneous aging

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Conflict of interest: María Vitale is a medical dermatology director at Cantabria Labs.

INTRODUCTION

Skin aging is a physiological process determined by endogenous mechanisms and external environmental aggression. Ablative fractional laser is a useful tool among the different strategies to reverse the signs of this **process**.

SCA is a cosmetic ingredient obtained from gastropods of the family *Cryptomphalus aspersa*, rich in proteins of low molecular weight with FGF-like activity, antioxidant enzymes and glycosaminoglycans. It stimulates the proliferation and migration of fibroblasts and keratinocytes, accelerating the process of wound healing.

OBJECTIVE

Assess the tolerance and the efficacy of **SCA Regimen** in inducing faster skin recovery after performing an ablative laser treatment in patients with moderate photoaging.

MATERIALS AND METHODS

STUDIED VARIABLES

- Clinical assessment (RAO-Goldman aging scale. IGA and PGA)
- Micro-dermatoscopic photography --> Microcolumn density measure
- Trans-epidermal water loss --> Skin barrier function (Tewameter®)
- Skin elasticity, firmness and wrinkles --> Anti-Aging effects (Cutometer® / Visioface®)
- Laser adverse effects: edema, erythema, burning, tightness

10 women with moderate to severe photoaging

Split face study

One laser session: CO₂RE® Fractional technology, CandelaTM.

4 visits: T0* - T1 - T3 - T7 - T21**



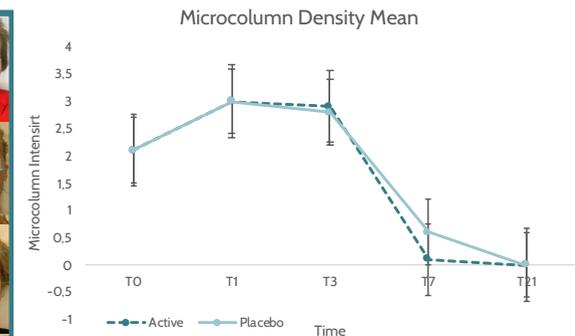
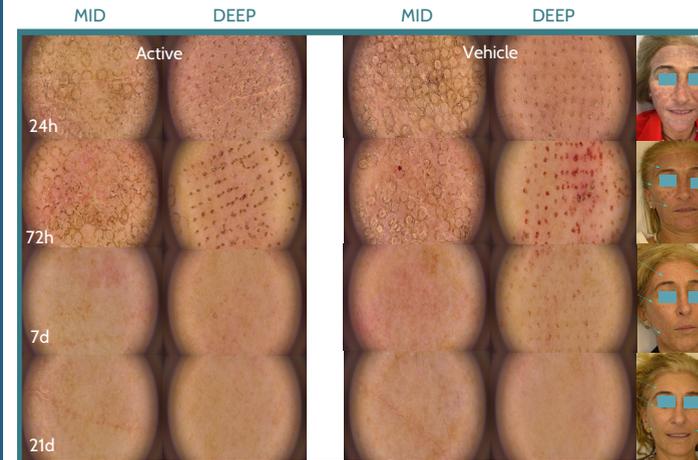
TREATMENT REGIMEN

Time Point	Active Treatment	Vehicle Treatment
T0	Laser Session • 60mJ/spot in deep mode, unique pass in "crow's feet" area and nasolabial furrow. • 16 J/cm ² sweep pass in medium mode (mid).	
T0 - T1	SCA 40% Ampoule	Ampoule Vehicle
T1 - T7	SCA 40% Ampoules + SCA 6% Hydrating Cream (Day and night)	Ampoule + Hydrating Cream Vehicle (Day and night)
PHOTOPROTECTION (Mineral Filters + Fernblock®: SPF 50)		
T8 - T21	SCA 40% Ampoules (Night) + SCA 6% Hydrating Cream (Day and Night)	Ampoules vehicle (Night) + Hydrating Cream Vehicle (Day and Night)
PHOTOPROTECTION (Mineral Filters + Fernblock®: SPF 50)		

RESULTS

MICROCOLUMN DENSITY

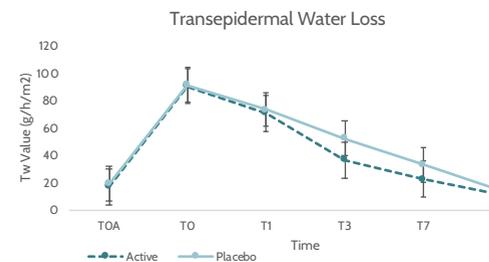
One week after laser treatment, cutaneous healing is significantly greater in active-treated hemifacial side than vehicle-treated side. (P = 0.04)



After 7 days, active-treated hemiface microcolumn density reduction is 83% lower than vehicle-treated hemiface. (P=0.04)

SKIN BARRIER

Skin barrier function, measured by the reduction of trans-epidermal water loss, was significantly greater in the active-treated side at T3 and T7 (P < 0.05).



ADVERSE EFFECTS

Regarding **Laser adverse effects**, the SCA regimen-treated side showed a significantly greater decrease in erythema (at T3, T7, and T21); burning sensation (at T3 and T7) and tightness (at T3 and T7) when compared to the vehicle treated side (P < 0.05).

SKIN AGING

Elasticity and wrinkles improved on both sides with laser procedure, but wrinkles improved significantly more on the side treated with SCA regimen (P < 0.05 at T21)

CONCLUSION

An immediate and continued cosmetic treatment based on the Secretion of *Cryptomphalus aspersa* enhances cutaneous healing and improves clinical results after ablative fractional laser in skin aging. The regimen showed very good tolerance.