

melanin hyperpigmentations: effective and lasting treatment of melasma in patients with a multi-ethnic profile using dermamelan®

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INTRODUCTION

Melasma is a type of hyperpigmentation characterised by the appearance of **generally symmetrical pigmented stains** on the face, particularly on the cheeks, dorsal surface of the nose, forehead and upper lip^{1,2,3}. It is **common in women of all ethnic groups and skin phototypes**, but it is most frequent in Asian, African and Latin American individuals⁴.

Numerous treatment options have been consolidated in the last decades. In this regard, a distinction can be made between treatments that seek to eliminate the melanin deposits and those that seek to regulate melanin synthesis within the melanocyte.

In relation to the elimination of melanin, laser therapy and intense pulsed light (IPL) are popular and widely used solutions, but they are expensive and invasive, have demonstrated heterogeneous efficacy in multi-ethnic profiles and even pose a high risk of post-inflammatory hyperpigmentation⁵.

Furthermore, there are many topical treatment alternatives: chemical peelings, creams containing acids to accelerate epidermal turnover, and even medical topical formulations based on hydroquinone, to regulate melanocyte activity.

All these therapies represent a partial solution to a very complex problem that **requires a multi-focal approach capable of securing melanin elimination and regulation with the purpose of affording a short and long term solution, with maximum patient safety regardless of ethnic group or phototype.**

OBJECTIVE

To evaluate the efficacy and safety of the **dermamelan®** method in treating facial melasma among patients with a multi-ethnic profile and differentiated skin phototypes (according to the Fitzpatrick scale).

dermamelan® offers a multi-focal approach to melasma treatment and control, thanks to its corrective and regulatory effects that modulates melanin synthesis, reduces transfer of the pigment from the melanosomes to the keratinocytes, while also eliminates melanin accumulation at epidermal level.

METHODS

A retrospective analysis was made of 33 cases of mixed melasma corresponding to Caucasian, Asian, African and Latin American ethnic groups with skin phototypes II-V, treated with the **dermamelan®** method between October 2013 and May 2016.

The treatment protocol comprised a clinic session for renewal of the dermis and reversible inhibition of melanogenesis, combined with home treatment to complete epidermal turnover and regulate melanogenesis.

STEP 1: AT THE CLINIC

Application of the full 10 grams of **dermamelan mask** as a thick layer on the entire face, with increased thickness over the hyperpigmentation zones. The product was allowed to act upon the skin for the recommended time according to the skin phototype involved*:

- **Phototypes I and II:** 8 hours
- **Phototypes III and IV:** 10 hours
- **Phototypes V and VI:** 12 hours

STEP 2: AT HOME

Application of the **dermamelan treatment** maintenance cream, based on the following scheme:



Simultaneous hydration and solar protection is essential, applying melan recovery and mesoprotech melan 130+ pigment control.

* The product application times can be modulated according to medical criterion and considering the individual characteristics of the patient and skin ethnic group. In Asian patients with a thinner skin horny layer may experience increased sensitivity and it is advisable to limit the application time to a maximum of 8 hours^{4,6}.

RESULTS

CLINICAL EVIDENCE

Age: 52 PHOTOTYPE III MASI: pre: 23.1 post: 9.9 Δ : -57%



Age: 41 PHOTOTYPE IV MASI: pre: 27.3 post: 7.8 Δ : -71%



Images courtesy of Dr Pulvirenti

Age: 52 PHOTOTYPE V MASI: pre: 23.1 post: 9.9 Δ : -57%



Age: 35-**PHOTO.V-MASI**: pre: 12.6 post: 4.8 Δ : **-62%**



Images courtesy of Dr Danmallam

Age: 41-**PHOTO.V-MASI**: pre: 25.5 post: 3.6 Δ : **-86%**



Images courtesy of Dr Reddy

IN VITRO

Studies in human melanocytes have evaluated the melanin synthesis reducing capacity of the complex of ingredients contained in **dermamelan**[®] after 48 hours⁷:



control culture

48 hours culture with dermamelan active ingredients

Fig. 1: *In vitro* study. Melanin synthesis. Fontana-Masson stain. mesoestetic Pharma Group, S.L. 2014.

IN VIVO

The evolution of the hyperpigmentations was monitored up until day 120 of the study.

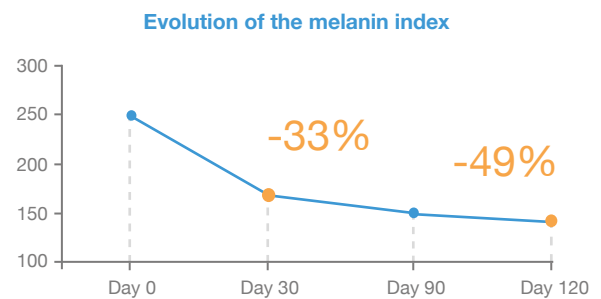


Fig. 2: *In vivo* study: Reduction of pigmentation as measured by evolution of the melanin index at each control point, calculated with the mexameter[®]. mesoestetic Pharma Group, S.L. 2016.

CONCLUSIONS

- Efficacy in 100% of the treated cases*.
- Visible results from the first week of treatment.
- Notorious improvement of skin quality and reduction of superficial wrinkles in 100% of the cases.
- No post-inflammatory hyperpigmentations were reported during the treatment.
- The **dermamelan**[®] method has been shown to be effective and safe in patients of all skin ethnic groups and phototypes.

* Measurement made with the mexameter[®] (day 0, day 15, day 30, day 60 and day 120) and/or MASI[®] (before and after treatment)



- **LEADER IN DEPIGMENTATION**

Its trajectory, distribution, international presence and leadership support the credibility of the method.

- **UNIQUE, DUAL-ACTION SOLUTION**

dermamelan has a dual effect, corrective and regulator, achieving short and long-term results by keeping pigmentation under control and preventing any recurrence.

- **PROVEN RESULTS**

Empirical evidence shows the high degree of efficiency of the method. More than 100 clinical cases evaluated under medical control guarantee its short, medium and long-term efficacy.

- **HIGH DERMAL SECURITY**

Strict quality standards and numerous *in vivo* studies demonstrate its excellent safety profile and skin tolerance.

- **HIGH PROFESSIONAL REPUTATION**

Thousands of professionals around the world already treat pigmentation with the dermamelan method.

- **CUSTOMER SATISFACTION**

Visible results from the first week of treatment and a long-lasting effect mean high satisfaction, well-being and enhanced patient quality of life.



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