LA ROCHE-POSAY
LABORATOIRE DERMATOLOGIQUE

Are sunscreens efficient in melasma?

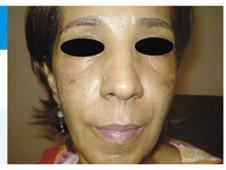
PHOTOPROTECTION | FOCUS

- Melasma is a commonly acquired hyperpigmentation on sun-exposed areas.
- It occurs more frequently in skin types IV–VI and is prevalent in Hispanic, Asian and African-American women.
- The pathogenesis of melasma is not completely clear, but genetics, ethnicity, hormonal change and cumulative skin sun damage are implicated in its origin.[1,2]

Multiple approaches are used to prevent melasma, but all include:

Pigments afford a protection against pigmentation induced by visible light[3]

Broad ultraviolet (UV)-spectrum sunscreens with UVB/UVA and visible light protection[4]



How to protect melasma patients?[5]

Applying a suncare product combining a UV sunscreen with 4% of hydroxyquinone (HQ) for 8 weeks on melasma lesions reduces MASI score by 75% on average (2 mg/cm^2 applied every 2 to 3 hours between 8am to 5pm) and improves physician satisfaction from good to excellent.

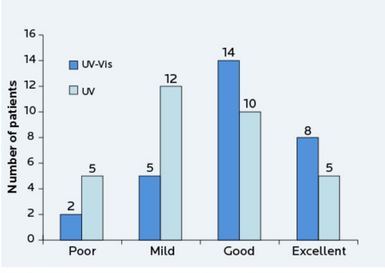


Fig. Global physician assessment at the end of trial (week 8). Improvement of the UV-Vis sunscreen group was better rated, as good-to-excellent against poor-to-mild.

What's to be done in practice currently?

Unrecognized exposure to visible light might interfere with treatment depigmenting effects, or might induce recurrence after solar exposure despite conscientious UV-only sunscreen application.[5]

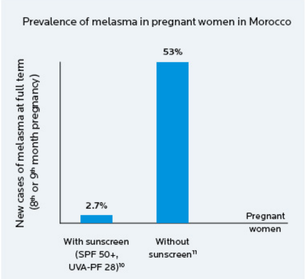
Visible light can stress already-impaired cellular functions that are more susceptible to its oxidizing and melanogenic effects	Premature cumulative sun damage	Chronic inflammation

MELASMA LESIONS = ACCUMULATION OF ELASTOTIC TISSUE WITH ABUNDANT MAST CELLS AND MONOCYTES INFILTRATING THE DERMIS[4,7]

Recommendations to help patients manage Melasma:[9]
- Use a sunscreen daily, even on cloudy days. It may be reapply after swimming or sweating. Better to use a sunscreen that offers broad-spectrum protection, a Sun Protection Factor (SPF) of 30 or more, and containing pigments (iron oxide, titanium dioxide).
- Wear a wide-brimmed hat and sunglasses outside. Whenever possible, it is important to seek shade and wear protective clothing in addition to applying sunscreen.
- Choose gentle skin care products that don't sting or burn, as products that irritate the skin may worsen melasma.

What about melasma during pregnancy?

Pregnancy is a period of hormonal changes that encourages melasma appearance. Because this hyperpigmentation is aggravated by sun exposure, it is necessary to prescribe external sunscreen to pregnant women.



Results of a clinical study[10] over a 12-month period on 200 pregnant women in Morocco[10,11]

- Currently, the appearance of melasma is a real concern for pregnant women of all skin types, impacting their quality of life.
- Thus, gynecologists, dermatologists and general practitioners are encouraged to prescribe an effective broad-spectrum sunscreen with high SPF and high UVA-PF associated with the appropriate skin care as part of their pregnancy follow-up, in order to avoid post-pregnancy treatment of melasma, more difficult to deal with and not always as effective.

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