

A Review on Advances in Management of Melasma

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Abstract: *Melasma is a common pigmented disorder with unresolved pathogenesis. Factors include increased sun exposure, genetics, estrogens, progesterone, and melanocyte stimulating hormone. Treatment is challenging, with many modalities ineffective. Dermal and mixed variants are resistant. Sunscreens, topical depigmenting agents, chemical peels, and light sources are main treatments. Advances in understanding and management have been made. Melasma, a common cosmetic issue, can range from minor pigmentation during pregnancy to chronic, disfiguring conditions. Treatments vary, with hormone replacement therapy and increasing aesthetic demands requiring regular sunscreen use and topical medication. Melasma management is challenging and the outcomes following treatment are not always deemed satisfactory. Solely treating hyperpigmentation may prove ineffective unless paired with regenerative techniques and photoprotection, since one of the main reasons for recurrence is sun exposure. Hence the treatment protocol starts with addressing risk factors, implementing stringent UV protection and then treatments, employing laser and light therapies. Melasma is a skin disorder caused by excessive melanin production and accumulation. Factors contributing to this disorder include genetic susceptibility, ultraviolet radiation, hormonal treatments, and abnormal α -MSH release. Efforts have been made to treat hyperpigmentation, including approaches, active molecules, and nanotechnology-based delivery systems. Topical delivery of hypopigmenting agents has shown success.*

Keywords: Melasma type , laser therapy, medical, Hydroquinone, Lasers