

Procedure-based management options for pregnancy-associated pigmentary abnormalities

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Abstract

Pigmentary changes, such as melasma and hyperpigmentation, are reported in more than 90% of pregnant patients. Treatment of melasma and hyperpigmentation in pregnancy is not recommended as these pigmentary changes may improve or resolve postpartum. When therapeutic intervention is indicated postpartum, topical medications such as hydroquinone, topical retinoids, and kojic acid, should be tried first. Chemical peels and device-based therapies, including laser and intense pulsed light, are indicated when topical medications fail. Chemical peels that have been successful in randomized control trials (RCTs) include glycolic 20-70%, salicylic 20-30%, trichloroacetic 20%, and amino fruit 20-60% acids as well as Jessner's solution. Ablative lasers, such as carbon dioxide and erbium, have been successful in RCTs but carry the risks of postinflammatory hyper- or hypopigmentation. Q-switched lasers, such as alexandrite and Nd:yag, have been also effective in RCTs and carry less risk of dyspigmentation. Fractionated lasers have been effective, especially when combined with a tyrosinase inhibitor. Intense pulse light therapy can be successful but carries the risks of dyspigmentation, blistering and scarring. Dermabrasion and microdermabrasion have been used with some success, but have not been evaluated in RCTs. Outcomes are better when the above procedures are combined with hydroquinone and/or other topical medications. The presenter will include his own experience with chemical peels and device-based procedures. Clinical cases will be presented in an interactive way.

Biography

George Kroumpouzos, MD, PhD, FAAD, is Clinical Assistant Professor of Dermatology at the Alpert Medical School of Brown University and former Instructor at the Department of Dermatology, Harvard Medical School. He is certified by both American and European Boards of Dermatology. Dr. Kroumpouzos' expertise is in the fields of obstetric dermatology, adverse drug reactions, connective tissue disease, complex medical dermatology, and disorders of pigmentation. He is an editorial board member in three peer-reviewed dermatologic journals, and has published more than 50 peer-reviewed publications and book chapters. Dr. Kroumpouzos has delivered numerous lectures in the US and internationally. He has been the recipient of several scholarships and awards, including Awards by the International Union against Cancer and the Dean's Award at Brown Medical School.