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Renata Porphirio Dermatologist, Brazil

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Brazil is a country with intense miscegenation due to great ethnic mixtures and as a result, we see different skin tones. The origin of melasma is related to genetic generation, sex hormones, medications and exposure to the sun, and the geographic location of high incidence of ultraviolet radiation (UVR) favors the development of the disease in the country. Requiring the sum of factors and the high level of involvement in the Brazilian population - about 15-35% of adult women -, treatment to improve this condition is much sought after in dermatological clinics, and given the country's tropical climate, care is taken when choosing. The treatment must take into account the downtime of the chosen technology, the habits and customs of Brazilians. There is a need for a treatment that is not aggressive due to the pathophysiology of the disease and thus excluded by laser with minimal damage to the skin. Remembering that melasma also has a vascular component, which is of paramount importance for the patient's treatment plan, ensuring good results. A good choice of treatment for melasma cases with vascular association and lifestyle, is the use of long pulse Nd: Yag laser, such as Fotona Laser in Versa mode with 4 mm spot. It is recommended 2 to 3 combinations at monthly intervals and with improvement when done in association with the laser toning mode treatment. The Laser Toning Mode is a Nd: Yag 1064nm Q-switch laser that when used in 5ns spot 8mm and 10hz treats several pigmented lesions that have different characteristics in terms of color, size, location in the tissue and origin. The safety of this mode occurs because the energy is below the thermolytic effect when the energy is below 5mJ / cm2). The action of the wavelength is at the "subcellular" level, where only pigments break and do not damage cells, thus being called "selective subcellular thermolysis". The non-ablative Nd: YAG 1064nm Q-switched laser emits ultra-short waves, lasting nanoseconds, and with high energy peaks that completely disorganize the keratin and corneocytes, allowing an increase in skin permeation, up to 12 times in relation to the skin intact. Waiting for this action, we see a response being potentiated when it is associated with drug delivery, that is, a sterile substance with a whitening action. The tranexamic acid at the end of the laser session is technical. Remembering that for the drug delivery to occur it is necessary to have the stratum corneum rupture. The benefit of using non-ablative lasers lies in the shorter recovery time required and the lower risk of adverse effects, as they comply with epidermal integrity.

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Conclusion: The results associating the Q-switched laser in the laser toning technique with a specific formula for drug delivery are noteworthy for optimizing laser toning results, bringing to discussion the benefit of the association of procedures that guarantee more promising results due to the increased permeability of the stratum horny. As it is an innovative technology, with a short recovery time, which does not preclude the patient from performing their activities and which can be performed in higher phototypes with a minimal risk of adverse effects compared to other lasers, the mentioned method deserves further studies to confirm the results. Studies exploring the use of Q-switched laser for drug delivery are less numerous than those related to the use of ablative lasers, whether fractional or not, and, therefore, further studies are needed to clarify the doubts that persist about the Subject

Biography

Dra Renata Porphirio is a physician, dermatologist and has been working with different lasers and technologies for 8 years. Dra Renata has the characteristic of being very focused during the session and loves to make associations with different wavelengths for better results for her patients.