

## Title: Treatment of Refractory Melasma Utilizing Various Energy-Based Devices (EBD)

Pigment disorders, alongside acne-related issues, rank among the most prevalent conditions encountered in dermatological practice. As a dermatologist, your repertoire may include the treatment of a wide spectrum of pigmented lesions. This ranges from simple spots tackled with a CO2 laser during your residency, to common pigmentation forms such as freckles, melasma, and dull spots, frequently observed in clinical settings. Additionally, you might encounter congenital pigmentation such as Ota nevus, Café-au-lait spots, and congenital giant nevi. With a stroke of luck, one might even confront more challenging pigmentation cases, like Riehl's melanosis or Becker's nevus.

In the pursuit of managing diverse pigment disorders, one encounters cases with a variety of responses to treatment. Some might respond favorably, while others may prove recalcitrant, failing to improve or even worsening after multiple treatment attempts. In this session, we delve into the strategic approach to managing stubborn melasma that show poor improvement or exacerbation post-treatment.

Various methodologies exist for the treatment of intractable melasma, but they all share a common objective - preserving the basement membrane while achieving dermal rejuvenation. We begin with a succinct overview of laser toning, the fundamental approach. This will equip you with a firm grasp of low-power and high-power laser toning techniques, utilising 1064nm QS-ND:YAG or PICO.

Once the rudiments of toning methods are understood, we will elucidate strategies for safely managing refractory melasma. This will encompass treatment via dermal rejuvenation, employing a myriad of techniques. These include the pico fractional laser, non-invasive fractional lasers like the 1540 XD, dye lasers such as the V Beam or DDR, moving RF devices like InMode, slightly invasive RFs like Legato and Potenza, and skin boosters like Juvelook.

For the management of dull spots and larger, deeper pigmentation, our focus will be less on theoretical aspects, and more on the practical application of treatment. We will use actual cases as a guiding framework, enabling a more effective understanding of the treatment process.

### References

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3. The differences in the in vivo behavior between PDLA (Poly-D-lactic acid) and PLLA (Poly-L-lactic acid): Biomaterials 22(2001) 2371-2381

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