

## The Efficacy of 3 Different Modes of Er:YAG 2,940-nm Laser Combined with Nd:YAG 1,064-nm Laser for Lower Eyelid Rejuvenation

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Owing to modern medical advances, many modalities have been implemented for the treatment of eye bags and lower eyelid rejuvenation. In this study, a novel non-ablative Erbium:YAG laser, renowned for its non-invasive, efficacious laxity treatment via collagen remodeling and neo-collagenesis, is applied in combination with Nd:YAG laser to revitalize lower eyelid glamor.

To study the efficacy of 3 different modes of Er:YAG (2,940-nm) laser combined with Nd:YAG (1,064-nm) laser for lower eyelid rejuvenation.

A total of 24 participants with a mild to moderate degree of lower eyelid bags were recruited in this study. All patients were treated with a four-step laser procedure: Er:YAG SmoothLiftin® (trans-conjunctival approach), Er:YAG SmoothLiftin® (upper and lower lid), Nd:YAG PIANO® (lower lid), and Er:YAG SupErficial™ (upper and lower lid) every four weeks for four sessions. After the physical examination, five views of the periorbital area were captured by digital camera from all participants for uniqueness score grading. The 3D pictures were also recorded by an Antera™ camera system for assessment of eye bag improvement. The clinical outcomes were evaluated before, 4 and 12 weeks after the end of laser treatment by means of cutometer and colorimeter (melanin and erythema indices).

**Results:** 19 participants completed the treatment protocol. The evaluation of lower eyelid bags achieved 33.68% improvement by week 4 after the final laser treatment and even greater 51.05% by week 12. No serious complications were detected.

The combination of 3 different modes of Er:YAG laser and PIANO mode Nd:YAG has yielded promising lower eyelid rejuvenation outcomes with minimal downtime.

## Combination of Cryolipolysis and Hyperthermic Laser for Non-invasive Body Contouring Treatment

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Non-surgical body contouring procedures are rapidly on the rise and are expected to surpass the number of surgical procedures in the years to come. The benefits of non-surgical body tightening include minimal-to-no downtime, fewer side effects and reproducible outcomes. These features of cryolipolysis make it a more favorable option compared to surgical procedures.

The market leading cryolipolysis treatment promises efficacy and patient safety, successfully reducing up to 24% of subcutaneous fat in each treatment. However, there are some limitations worth mentioning when cryolipolysis is used as a single-treatment modality. A few of the major dilemmas encountered with cryolipolysis include difficulty in achieving skin tightening following fat reduction and cellulite reduction. Furthermore, cryolipolysis may not be the most suitable choice of treatment for certain areas of the body.

Combining Long Pulsed Nd:YAG and Er:YAG gently and safely heats up the targeted tissue, promoting tissue remodeling and rejuvenation of the surrounding tissue. Likewise, laser tightens the skin by generating new collagen, resulting in an overall improvement of skin laxity and elasticity in the treated areas. The objective of this clinical case study is to investigate the clinical safety, effectiveness and other benefits of combining cryolipolysis and hyperthermic laser therapy in non-invasive body contouring treatments.

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