
Hybrid Laser for Facial and Body Rejuvenation

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1. Material

The hybrid laser for rejuvenation consists of the combination of two wavelengths CO₂ of 16000 nm and Erbium of 1570 nm. Indicated for the treatment of fine wrinkles, acne scars, post-surgical scars, stretch marks, facial rejuvenation, and hyperpigmentation. Its technology allows you to choose between different combinations of shape, size, and density of the light beam for optimal treatment, as well as the proportion of CO₂ laser and Erbium Glass, which is chosen depending on the pathology you wish to treat.

It has an intense cooling system that numbs the skin, protecting the tissue, increasing the patient's comfort during the treatment.

The Pro scan handpiece allows us to perform intelligent ablative treatment with the CO₂ Laser (10600 nm) and cold coagulation with the Erbium Laser (1570 nm) with the HyGrid scanning pattern.

It is safe, it gives us different precise and versatile combinations of both wavelengths, with or without overlap.

The HyGrid mode allows us to use both lasers in various percentages, for example CO₂ and Erbium at 50% each, CO₂ 66% and 33% Erbium or 33% CO₂ and 66% Erbium. It is a highly effective treatment in just 1 or 2 sessions, both wavelengths maintain their original effect side by side.

2. Method

It is also possible to use both laser sources (CO₂ and Erbium) at the same point of application with the hands-free variant.

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After administration of the laser, a solution of hyaluronic acid, Vitamin C, etc., can be applied to the laser-treated area. Any of these medication options are introduced with a device called Impact, which is a Transdermal Ultrasound that helps the cosmeceutical penetrate directly into the tissue. This system improves the result and reduces itching and pain by stimulating cells that have been damaged. These treatments are usually carried out every 7, 15, 21 or 30 days, depending on the patient's needs.

It requires a short downtime ("during the weekend"), because by using a low density of each wavelength the patient's evolution is rapid.

It is done on an outpatient basis. Local anesthetic cream is used to minimize the sensation of heat for around 45 minutes. The patient will present inflammation, redness and peeling during the following days (2-3 days) and may persist longer if high parameters are used.

3. Results

The hybrid laser can be applied in different medical and surgical pathologies as well as for aesthetic purposes. Following the established protocols, constant and largely satisfactory results are obtained for the patient and the treating doctor. Our patients have been treated including the following pathologies and procedures.

- Facial and body rejuvenation
- Facial and body skin tightening
- Onychomycosis
- History of keloid, acne, and post-traumatic scarring
- Skin phototype I to VI (according to Fitzpatrick scale)
- Poor healing in the area to be treated
- Irregular skin pigmentation
- Vitiligo or psoriasis.
- Sequelae of burns
- Laser surgical procedures
- Many more applications.

4. Contraindications

- Active viral or bacterial infection
- Pregnancy or Breastfeeding
- Human immunodeficiency
- Use of oral isotretinoin
- Patients with any Collagen disorder
- Scleroderma

The following points were especially clarified:

- This treatment is contraindicated for patients with any concurrent cancer or history of skin cancer, active infection, or bacterial diseases.
- A bacterial, viral, or fungal infection may occur. The most common infection is an outbreak of the herpes virus. In most cases, the herpes virus is present on the skin but is latent.
- Weeks after the treatment, the treated skin may become darker (hyperpigmentation) or lighter (hypopigmentation) than it was before treatment. Permanent changes in skin color are more common in people who have darker skin.
- Treated skin may itch, become swollen and red. The erythema can be intense and can last several months. It should be remembered that redness is synonymous with collagen production, so it is important to explain it to the patient to use higher parameters if the result we are looking for is more important.
- Aggravation of an existing skin condition, such as rosacea, may contribute to redness and require additional medical treatment.
- The patient with oily skin prone to acne may present activation of the acne or millium outbreak.

5. Conclusion

Improvement of wrinkles and soft tissue depressions can be improved by other treatments, including, but not limited to, treatments such as chemical peels, dermabrasion or other skin procedures, alternative types of tissue fillers, or surgery. such as face or forehead lifting in indicated cases.

While cosmetic laser treatments are effective in most cases, there is a risk that it may not be effective or that the result may not be what the patient expected. Not achieving the expected result or suffering adverse effects can have a physical and psychological impact.

However, the Hybrid laser has allowed the result to be as expected by the patient and us in 90% of the cases treated by us. By combining both light sources, the erythema is more controlled without affecting the result.

Another advantage is that this device safely provides us with a wide variety of treatment options for different dermatological pathologies that to date could not be performed with other laser equipment.

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