

# Facial Skin Rejuvenation With FriendlyLight Er:YAG Laser

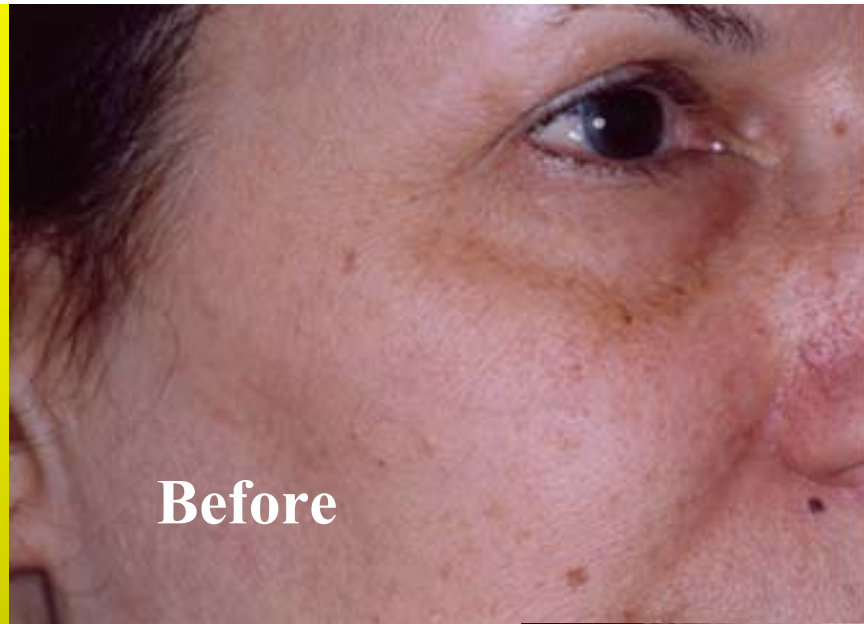
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By J. Gordon MD, K.Khatri MD

Westchester Eye Associates, White Plains, NY

Skin & Laser Surgery Center New England, Cambridge, MA and Nashua, NH

LSR with FriendlyLight<sup>®</sup> Er:YAG Laser Periocular and Mid-Facial Regions  
5 Passes, Fluence 5 J/cm<sup>2</sup>, Spot Size 6mm, Rep. Rate 1.5 Hz



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Periocular LSR with FriendlyLight<sup>®</sup> Er:YAG Laser with Botox<sup>®</sup> Treatment  
4 Passes, Fluence 5 J/cm<sup>2</sup>, Spot Size 6mm, Rep. Rate 1.5 Hz



Periocular LSR with FriendlyLight<sup>®</sup> Er:YAG Laser with Botox<sup>®</sup> Treatment  
4 Passes, Fluence 5 J/cm<sup>2</sup>, Spot Size 6mm, Rep. Rate 1.5 Hz



Periocul LSR with FriendlyLight<sup>®</sup> Er:YAG Laser with Botox<sup>®</sup> Treatment  
4 Passes, Fluence 5 J/cm<sup>2</sup>, Spot Size 6mm, Rep. Rate 1.5 Hz



LSR with FriendlyLight<sup>®</sup> Er:YAG Laser with Upper Eyelid Blepharoplasty. 5 Passes to Periocular and Mid-Facial Regions, 7 Passes to Perioral Region Fluence 5 J/cm<sup>2</sup>, Spot Size 6mm, Rep. Rate 1.5 Hz



Before Treatment



Three Weeks After Treatment

# **FACIAL SKIN REJUVENATION WITH 300 $\mu$ s PORTABLE ER:YAG LASER**

*J Gordon, K. Khatri*

Westchester Eye Associates, White Plains, NY

Skin & Laser Surgery Center of New England, Cambridge, MA and Nashua, NH

**Background and objective:** Facial rejuvenation using ablative and non-ablative methods is one of the most popular procedures in the cosmetic surgery. CO<sub>2</sub> laser was the first ablative laser used for resurfacing. In 1997 FDA approved Erbium:YAG laser for treatment of wrinkles. Er:YAG laser leads to a shorter recovery period and has fewer side effects compare to CO<sub>2</sub> laser. However, it still requires a “down time” of about a week. Physicians who use lasers are concerned about the large size and high initial and maintenance cost. Most machines are large and are very expensive and it becomes a long process for physicians to recover their investment. Many physicians performing cosmetic laser surgery maintain more than one office.

FriendlyLight Laser Corporation has developed a small portable, relatively inexpensive Er:YAG laser device that is easily moveable from office to office and takes less space. It can fit in a suitcase and can be carried on an airplane as a “carry on” luggage. It can be used to resurface skin and to remove benign, pre-malignant and superficial skin cancers. One of us (KK, Ablation of Cutaneous Lesions using an Erbium:YAG Laser, J Cosmetic & Laser Ther 2003; 5:150-153) has published the data using an Er:YAG laser for these indications.

The data shown here describes the use of this portable Er:YAG laser. We treated and collected data to study efficacy of this portable 300  $\mu$ s pulse Er:YAG laser for facial skin rejuvenation.

**Study Design/Materials and Methods:** Nine patients were recruited from a private Ophthalmology clinic. All patients were Caucasian with skin type I-III, the youngest being 26 and oldest being 63 years old with a average age of 47. All patients were female, four with skin type I, four with skin type II and one with skin type III.

Patients were treated for rhytides, large pores, pigmented spots/lentigines, and photo-damage. Patients who received three or less passes used topical anesthesia, EMLA® cream for 45 minutes before the procedure. All other patients were anesthetized with local injection of 2% lidocaine with epinephrine. Small facial areas such as periorbital, nose, cheeks and upper lip were treated with 3 to 7 passes with a fluence of 5-6 joules/cm<sup>2</sup> with a spot size of 5mm and a repetition rate of either 1.5 or 2.0 Hz. A FriendlyLight® portable Er:YAG laser was used. Immediately after procedure patients described feeling of “warmth” or “heat” which resolved within 24 hours. Aquaphor® ointment was applied to the treatment site to lessen patient discomfort and to keep the area moist. All patients were followed for a period of 3 to 6 months and photographs were taken.

### **Results:**

Patients described level of discomfort after procedure as “low to moderate.” Depending upon the number of passes, re-epithelialization was complete within 2 to 7 days. The intense erythema resolved within 7 days and there was blending of treated and untreated areas within 2 weeks. Patients expressed high level of satisfaction with the results.

**Conclusion:** The technique of applying a tailored number of 5-6 joules/cm<sup>2</sup> 300 μs pulses of Er:YAG laser appears to be safe and effective. There is minimal patient discomfort and a very high level of patient satisfaction after a relatively short recovery time. The data presented here shows that a new portable Er:YAG laser is highly effective in treatment of facial areas for rejuvenation. It is also an ideal “laser” for a cosmetic surgeon who is trying to incorporate lasers in his/her practice, and can be an added advantage when used after blephroplasty.

# Let FriendlyLight Laser Work For You Today



FriendlyLight<sup>®</sup> Er:YAG Laser

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