COMMENTARY

Treatment of Cutaneous Lupus Erythematosus Using the Pulsed Dye Laser

Christian Raulin, MD, PhD, and Stefan Hammes, MD*

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The prospective study by Truchuelo Díez and colleagues[1] points the way ahead. For the first time, histologic and immunohistologic examinations have been conducted and their results correlated with the similarly excellent clinical results.

The treatment of cutaneous lupus erythematosus (CLE) using the pulsed dye laser (PDL) was described for the first time by the group of Pablo Boixeda and Maria Nunez.[2] Since then (15 years ago!), there have been only a few studies[1–7] on this topic, but they have consistently confirmed the excellent results of the method.

The exact reason for the effectiveness of pulsed light at a wavelength of 585–595 nm of PDL in the treatment of CLE lesions is unclear. With laser therapy, the applied light is monochromatic, and there is strong evidence that the induced pathogenic mechanisms are different from those caused by irradiation over an ultraviolet spectrum.[4] The suggested working mechanism of PDL (selective photothermolysis) is selective destruction of the cutaneous microvasculature, which might modulate the inflammatory network, leading to regression of CLE lesions.[1]

Legitimate questions are why PDL has not become a standard method or even the criterion standard in CLE therapy and why it has not been included in the official guidelines of dermatologic associations, even though it is a simple and effective method with minor side effects. To answer the questions, an analysis might help, based on a thorough search of the literature in the relevant databases (MEDLINE and the Cochrane Library). The search terms cutaneous lupus erythematosus treatment, cutaneous lupus erythematosus pulsed dye laser, and wrinkle treatment were employed. From 2005 to 2010, we found 547 relevant articles for cutaneous lupus erythematosus (CLE), seven relevant articles with the combination of CLE and PDL, and 191 relevant articles for the cosmetic treatment of wrinkles on these databases.

It seems that conservative conventional dermatologists do not see or recognize the achievements of innovative laser therapy or that they simply do not know about them and thus do not implement them in their therapy regime, or it may be they have scruples about offering medically indicated services as direct-payment services because, in most cases, insurance companies do not pay for such therapies. For another thing, many dermatologists who mostly provide laser therapy have veered away from conventional dermatology and are dedicated to the therapy of cosmetic indications and "treatment" of patients with body dysmorphic disorders. This might be why their interest in treatments of inflammatory dermatological diseases such as CLE and other, not primarily cosmetic–aesthetic dermatological indications seems to have diminished.[8–12]

**Both authors are affiliated with Laserklinik Karlsruhe, Karlsruhe, Germany*

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Therapeutic success in aesthetic dermatology is a question not of restoring and maintaining health but of fulfilling the subjective criteria of happiness and contentment. The inevitable conclusion is that the happiness of the patient, which is subjective, becomes the center of medical attention, as opposed to the goal of restoring and maintaining health in the Hippocratic sense.[13] By accepting this shift in medical attention, we dermatologists miss the opportunity to explore our own specialty of dermatology to find new, effective methods with minor side effects using modern technologies such as laser therapy.

We must discuss why the field of aesthetic dermatology should not unreflectively link and ingratiate itself to the beauty industry. If aesthetic dermatology is oriented purely toward economic concerns, it runs the risk of creating a demand that would not exist without its own advertising. There is also the danger that a fiscal approach to aesthetic medicine will embrace the ideologies of our consumption- and performance-oriented society, with the primary goal of profiting from it. Over time, this could lead to a situation in which aesthetic medicine is completely eradicated as a discipline that is the domain of physicians.[14] Compared to related specialties, clinic-oriented dermatology has, as a result, not only not intensified, but also irrevocably lost the academic leadership concerning the treatment of certain skin diseases.

Coming to the point, in our opinion, PDL is a safe and effective measure for the medically indicated treatment of superficial CLE lesions and should be considered an effective treatment option with minor side effects.[15] We have treated more than 50 patients (Figures 1 and 2) successfully over the years. Treatment should be started as early as possible because

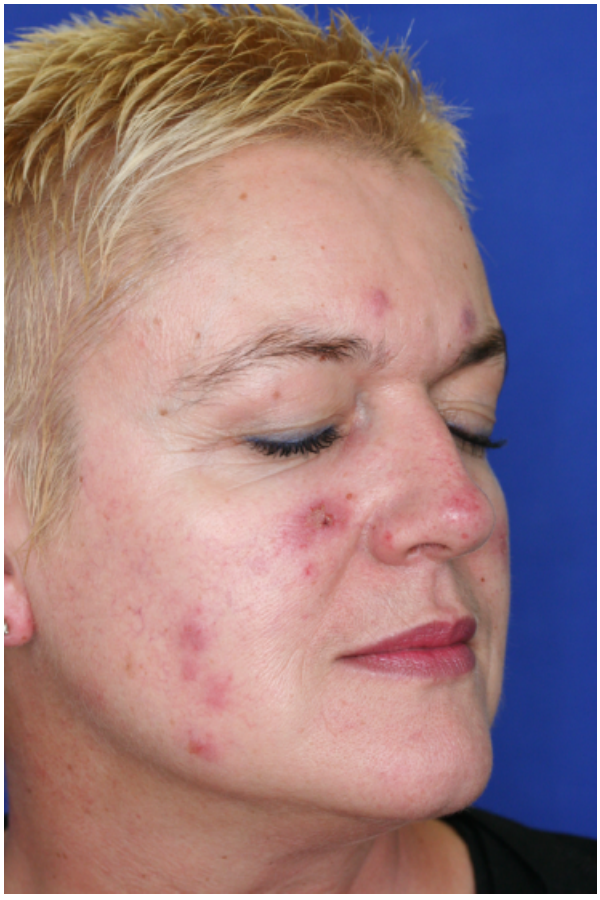

Figure 1. Lesions of discoid lupus erythematosus on the face (before treatment).

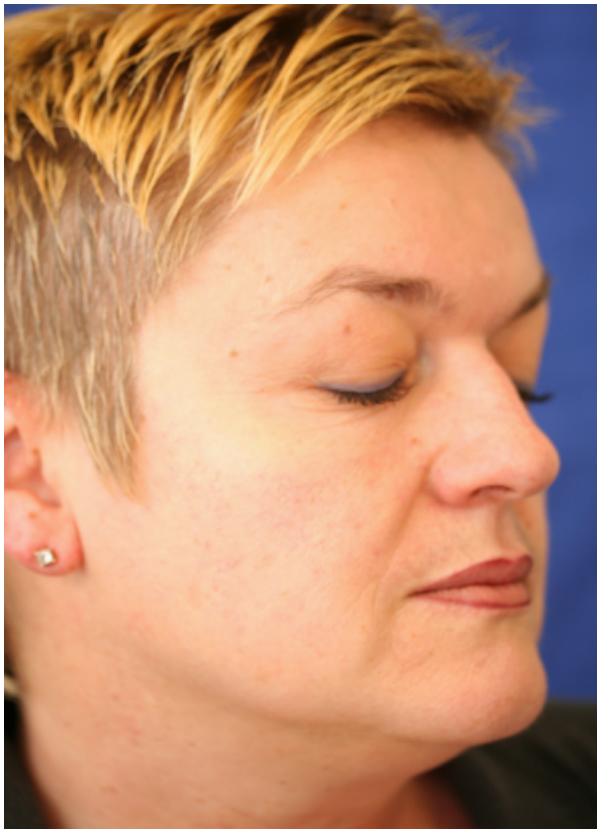

Figure 2. Result after three treatments with pulsed dye laser.

the progressive course of the disease may unnecessarily result in extension of scarring.

Looking to the future, more substantial prospective immunohistologic studies and randomized dose-finding studies are desirable to determine the exact working mechanism. We hope that the outstanding publication by Truchuelo Díez and his workgroup will lead to further diffusion of PDL in CLE therapy and that the significance of this effective and safe method will be redefined and reassessed.

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Address correspondence and reprint requests to: Christian Raulin, MD, PhD, Laserklinik Karlsruhe, Kaiserstrasse 104, D-76133 Karlsruhe, Germany, or e-mail: christian_raulin@web.de