

Monthly Newsletter by Dr. Larry Lytle

Volume 3 - Number 8 – Aug 2014



Skin Ageing and Low Level Laser Therapy

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Anti-ageing issues that range from health to appearance have recently attracted a great deal of consumer concern. Cosmetic patients prefer painless treatments with no down time. This issue of laser flashes will focus on treating various ageing effects on skin with the QLaser System. The protocol provided is based on authentic clinical trial done in Japan and published in International Journal of Laser therapy.

As we age, skin cell function naturally slows, and the results are various skin conditions like erythema, pigmentation, wrinkle, roughness and hair follicle enlargement. Skin ageing begins early in life due to environmental and dietary reasons and is referred to as environmental ageing. Research shows that light, even LED light such as used in the QLaser System can improve the quality of skin by up to 80% when used on regular basis and with the correct wavelength and protocol.

There are several light-based devices including the QLaser using controlled thermal energy via non-ablative photo rejuvenation to accomplish reversing or repairing skin cells damaged by the sun and the environment.

Light emitting diodes (LEDs) have recently been promoted on a selective basis for as a comfortable way of delivering light therapy for many indications. The concept of using low-energy, narrow-band light with specific pulse sequences and durations is called photo modulation. According to the reports from this group from Japan, LED photo modulation is a novel category of using non-thermal light to regulate the activity of cells without injury to under lying and surrounding cells.

Various studies on LED photo modulation have shown improvement in skin conditions associated with photo aging, erythema due to sunburn, erythema caused by other phototherapy or photo



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surgical intervention, and radiation induced dermatitis from radiation treatments for disease. Research further demonstrated that it was even more critical to use specific sequence of pulsation to maximize the effect in vitro on cultured fibroblasts. Diodes emitting a red light have been the diodes of choice for treating skin conditions. Red light varies from 630 nm up to 670 nm. Nanometer is used the method of measuring a wave length emitted by an LED or laser diode. A nanometer is 1/1000 of a millimeter and a millimeter is 1/1000 of a meter. The literature reports effectiveness in the visible light range of around 630 nm. Clinical research using a wave length of 650 nm – the wave length of the diodes used in the QLaser is also quite effective.

Published Clinical Study

A study done on fifteen Japanese male and female volunteers, ages 24-56 years old, used a 633 nm wave length device at a distance of 10 cm from the light source. The study reported up to 80% improvement in skin conditions. The dose or irradiance used was a dose of 3.26 mW/cm2 with a total energy of 10 W. In this study the volunteers removed all make-up and the light source was positioned 2-10 cm away from their faces. Treatment time was 15 minutes per session, with a radiant flux or dose of approximately 2.93 J/ cm2 and a total energy of 9000 J. The volunteers received ten treatments every week. Clinical assessment was conducted 1 week before treatment, week 5 and week 10 after the final treatment. (QLaser experience is by combining both LEDs and laser diodes; it does not take as long). Photographic imaging using a Canfield VISIA II system (Canfield, NJ) was used. This system was also used to assess the characteristic numbers of wrinkles, roughness, hair follicles and pigmentation. The system consists of a configurable head support that ensures the proper and consistent registration of the position of the patient's head. This assessment was performed the 5th week and again the 10th week when the study ended.

The improvement in the signs of photo aging was noticed by 80% of the volunteers. The remaining 20% of the volunteers responded poorly to the treatments. The signs of photo aging are erythema, pigmentation, wrinkles, roughness, and enlarged hair follicles. The best clinical results were seen in



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the category of roughness. Young volunteers achieved better improvement in roughness than the other categories, and wrinkles in older volunteers improved faster than the other categories. The level of improvement of erythema and pigmentation was lower than roughness and wrinkles. Roughness improvement was probably due to improvement in collagen of the skin cells.

QLaser Protocol for Skin therapy

Based on above study, the 660 Enhancer would be the choice of the QLaser System to improve skin condition. The 660 was also used to remove pock marks from severe acne as seen in the following brochure:



QLaser Systems presents the Q10 Cosmetic Enhancement Laser

Tomorrow's Beauty Care... Today!

Specializing in the Science and Art of Beauty Enhancement and Skin Rejuvenation



The Creation of Beauty is both Equal Parts Science and Art.



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The Q10 Cosmetic Enhancement laser NATURALLY helps improve:

- Wrinkles
- Fine lines
- Cellulite
- Collagen Increase
- Acne
- Age spots
- Sun damage
- · Blemishes
- Light Scarring
- · Rough skin
- Lips
- And More!

•<u>FAST RESULTS</u> in as little as 10 days!!!

- · Over a Decade of Experience in Low-Level Lasers and Research
 - · Revolutionary SOLITION™ Wave Technology
- Two Year Warranty, with Extended Warranty Available
- Three Beneficial Modes for Different Conditions
 - Application Specific Internal Battery
- Q-Charge Intelligent and Easy Charging System
- · Bright Multi-Colored Display
- Sleek, Ergonomic, and Stain Resistant Design
 - Extremely Portable
 - Easy One Button
 Operation
- · FDA Cleared for Safety

The Q10 Cosmetic Enhancement laser is the next revolutionary breakthrough in beauty and science. With patented SOLITON™ Wave Technology, the Q10 is the only cosmetic enhancement laser of its kind IN THE WORLD!

With four true laser diodes and five light emitting diodes, the Q10 triggers several internal reactions at the cellular level that generate more effective and faster cell renewal, increased collagen production, healthy and vibrant skin that starts at the cellular level, and a number of other positive effects.

Skin Rejuvenation and cosmetic enhancement can be completed with use of the Q10 due to its THREE main effects: biostimulative-regenerative, analgesic, and anti-inflammatory effects.

You will find that the Q10 is truly a superior, top of the line laser product that delivers the results you want fast!

Low Level Laser Clinics in Switzerland have already reported on the amazing efficacy of low level lasers for acne, cellulite, striae, alopecia, wrinkles, and collagen enhancement.*

Come discover for yourself why the Q10 is truly Tomorrow's Beauty Care...TODAY!

*Laser Center, Locarno, Switzerland



Pictured Left:
Before
Truly
Revolutionary!
Pictured Right
After treatment
with the Q10



Acne can lead to psychosocial trauma that not only leaves scars for everyone to see, but also causes distress and low self esteem. Just ask Jennifer (pictured above), who stated, "I felt like I tried everything, lotions, peels, medications, EVERYTHING my dermatologist could think of we tried." After losing hope, Jennifer tried the Qao Cosmetic Low Level Laser. Jennifer admits to her skepticism, "I just kind of thought that if it didn't irritate my skin, or feel like a burning sensation it wouldn't work."

Jennifer was surprised 7 weeks later when her face had completely cleared and even her acne scars began fading. "I can't believe the difference; my skin is smooth, taut, and best of all CLEAR!"

Use your 660 in rotating fashion approximately 1 inch from the skin and move to cover the entire affected area.

Brown spots, called aging spots, liver spots or sun spots have been reduced and sometimes eliminated using the 660 Enhancer, just out of contact with the skin, for 1-3 minutes per spot every other day until the spot disappears.

In other N of 1 cases mode 1 of the Q1000ng was applied for on sunburn to reduce pain, redness and blistering. When applied at the first signs of sunburn or immediately after one application of



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approximately 1-3 minutes to each area was effective in reducing pain, redness and eliminating blistering and the pealing or sloughing of the epidermis.

The QLaser System with its combination of LEDs and true low level laser diodes when properly applied on the skin permeates the top layers of the skin, sending a message to protein enzymes and cells. This message speeds up the cellular metabolic process, which activates your skin cells to produce more cellular energy (ATP) and collagen.

Use your Laser at least once a week and help your skin regenerate and provide a radiant glow throughout your life.

"You cannot unknow what you now know"

Remember: don't leave home without your lasers. Don't wait until you are sick or something hurts – <u>practice</u> the best prevention there is – keep cellular energy balance by applying the Q1000ng+laser