

# First-hand experience with LED: One doctor's story

By Lisette Hilton  
STAFF CORRESPONDENT

**Deer Valley, Utah** — Oculoplastic and facial cosmetic surgeon Richard L. Anderson, M.D., is not ready to bet the farm on light-emitting diode therapy (LED) for skin rejuvenation just yet. But he is excited about the results that he, his staff and his patients have achieved using the GentleWaves LED (Light BioScience) technology.

He is enthusiastic about the possibility of a therapy that does not "damage" the skin's surface or cause any thermal injury, but rather works below the skin, penetrating it to activate and energize cells — increasing collagen and elastin production.

"A lot of people equate LED with lasers. LED is not a laser. It is a part of a movement in the field away from lasers and into more light therapies," Dr. Anderson says.

Dr. Anderson, medical director of the Center for Facial Appearances and former professor and chief at the universities of Iowa and Utah, has spoken at professional meetings about concerns about heavy laser resurfacing. A surgeon who has worked with lasers

since the 1970s when the CO<sub>2</sub> laser first came out as a cutting tool, Dr. Anderson says that over-treatment with the laser and misuse of the technology have resulted in high complication rates. "You have the opportunity to do a lot of damage with the laser. For surgical treatment, I greatly prefer the tactile feel you get with a scalpel versus a laser," he says.

"Another concern with CO<sub>2</sub> laser resurfacing is the management of patients. It was almost like having a burn unit in the office."

He says it was quite tedious and time-consuming for physicians to treat CO<sub>2</sub> laser patients. "Some results were pretty good, but in a lot of cases, I felt like the skin lost its life and color. There usually was a step-off line from treatment and non-treatment areas. Even with time, the skin looked washed out," he says.

Anderson has gone back to using trichloroacetic acid (TCA) peels as his staple resurfacing method. "The CO<sub>2</sub> laser has become a paperweight in the closet," he says.

Dr. Anderson admits that, at first, he thought a device that required sitting in front of flashing lights for 35 seconds, with no pain and not even a blush, must be part of a scam. "You would think a fluorescent light would do as much," he says.

But because trusted colleagues told him it worked, he tried it himself on his staff, and offered it to patients with a money-back guarantee.

It was the first time Dr. Anderson had offered a financial guarantee to patients undergoing treatment. "I think I have a big enough practice and a good enough reputation that I was not going to jeopardize it with technology that I was uncertain about," he says, adding that he also offered the guarantee because treatments, while effective, are slow to show results. Typically, patients do not see much improvement until three months, after a series of eight to 10 treatments. He also had his own uncertainties to quell.

"Any time product, research and information are created by people who have motive for financial gain, you have to question it. I will say that there is some pretty good science by some pretty good people who have a financial interest in the instrument," he says.

Dr. Anderson has since become less skeptical about the technology, which is directed at improving skin quality, texture and look from below the surface. "It is foremost in cosmetic surgery that, first, you do no harm. This is the only specialty in medicine where we can make well people unwell. At least I did not feel in trying this technology like I would damage anyone," he says.

Now, about three months after his first of 10 GentleWaves LED treatments, Dr. Anderson says he thinks his skin feels like it did 20 years ago. Staff members who underwent treatment also say their skin feels and seems younger. Even their lips became plumper. Dr. Anderson's skin, which had been getting progressively drier, became softer. The changes are "hard to make an obvious case for," but most people note that their skin feels and looks better, he says.

His office estheticians are treating about 100 patients with the technology and he knows of only one complication, which was in a woman who reported having a transient rash on her eyelids.

According to Dr. Anderson, researchers are looking into using LED for hair growth and vascular

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RICHARD L. ANDERSON, M.D.

stimulation. When it comes to using it for skin rejuvenating, Dr. Anderson says, "I am telling patients that my office staff and I feel that it has worked for us. I am now at the point where I will no longer offer the money-back guarantee because I think the technology works."

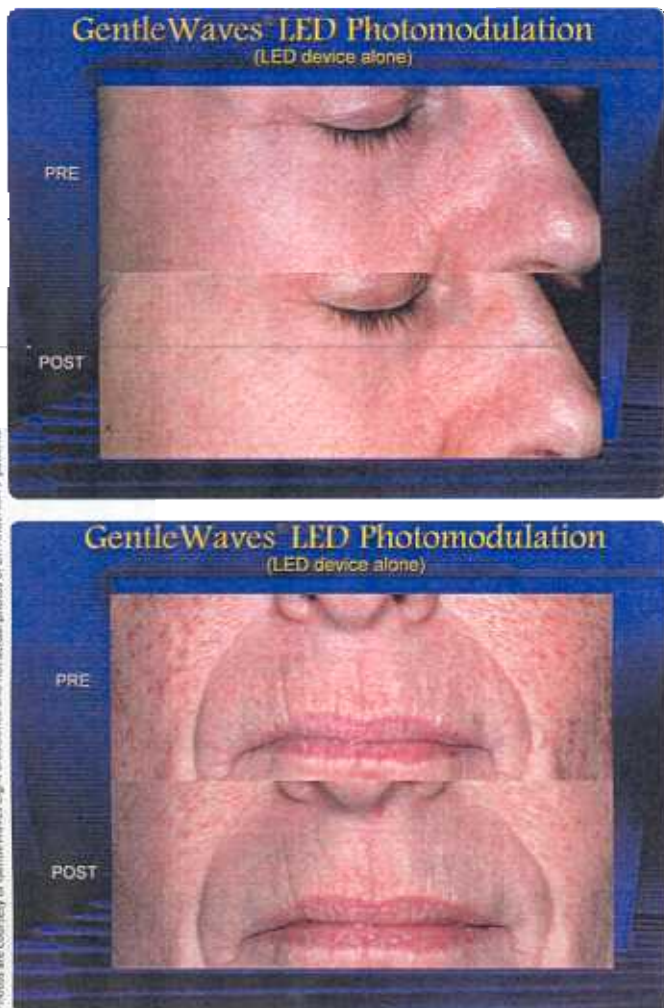
The treatment is simple, according to the surgeon. The doctor cleans the face of oil and makeup and turns the machine on; the flashing light treats the face for 35 seconds, and patients go about their days. He says people want the technology, even though there is no immediate gratification. Dr. Anderson and his staff treat the skin about once a week, for eight to 10 treatments during a three-month period. By three months, patients should see some continual improvement, he says.

"The good news and bad news is, there is no immediate gratification. I think it works better in conjunction with glycolic peels and microdermabrasion ... because patients get some immediate gratification from the other treatment," he says. "It appears that if the surface area is abraded or peeled slightly, the effect is greater."

Even Dr. Anderson's wife, who he says is his toughest critic, believes in the technology.

"I do not plan on retiring based on this machine; so, it is not like it is critical to my lifestyle — I am a surgeon," he says. "However, I think the LED technology is extremely exciting and is here to stay. We have many instruments and technology focusing on the surface of the skin, peeling, abrading and lasering. It is exciting that we now can focus on collagen production under the skin in a photosynthesis-like fashion." **CST**

Dr. Anderson reports no financial or research interests in GentleWaves LED technology.



"Before" and "after" photos of patients treated with GentleWaves LED photomodulation.