Aesthetic Buyers Guide® The Leading Cosmetic Practice Resource



March / April 2005

Orion Customers Report Good Tx Results and Patient Comfort

By Bob Kronemyer, Associate Editor

According to users, the Harmony and Sonata laser systems from Orion Lasers, Inc. (Ft. Lauderdale, Fla.) provide practitioners with state of the art technology designed for efficacious outcomes, treatment speed and patient comfort.

The Harmony multi-application system consists of up to six distinct technologies built into one compact unit including: Advanced Fluorescence Technology (AFT) for a wide-range of skin treatments, including skin rejuvenation, vascular/pigmented lesions, permanent hair reduction and acne; pulsed ultraviolet technology for restoration of lost pigment and psoriasis; long pulsed Nd:YAG technology for facial wrinkles and deeper and reticular leg veins; and Q-switched Nd:YAG technology for tattoos and dermal pigmented lesions and more.

"The AFT component provides speed and efficacy," said Madeline Krauss, M.D., a dermatologist in private practice in Wellesley, Mass. "The spot size is extremely large, thus enabling us to cover the face very effectively in a ten minute appointment. The Harmony also does a gorgeous job on the chest. Because of its even energy delivery, the AFT has an excellent safety profile, so you can overlap without fear. You can cover a large surface area like the chest without missing any area."

Dr. Krauss explained that AFT is "simply an advanced version of intense pulsed light (IPL) technology. However, with AFT, the clinical effect is accomplished using much lower power. The efficiency of AFT

begins with a fluorescent pre-filter that converts the unused UV light, which normally just created heat in an IPL handpiece, into the optimal spectrum you desire. The focused energy from AFT, is just what's needed to destroy unwanted blood vessels and pigmented lesions."

Compared to other IPL systems, Dr. Krauss is able to treat patients at much lower energy levels. "I can now treat at the 13 to 17 J/cm² range vs. at the 32 to 37 J/cm²

"I used to tell my IPL patients that they required a minimum of five sessions. But now I tell them they need three to five sessions, generally four weeks apart. Particularly with pigmented lesions on the hands, face and chest, you can achieve 80% to 90% clearance with three sessions."

range. I also achieve better results, with less patient discomfort. Because the energy is so focused and at an even pulse, the Harmony laser does not need cooling."

Dr. Krauss primarily treats photodamage with the Harmony, including lentigines and small telangiectasis, using the AFT component. "I used to tell my IPL patients that they required a minimum of five sessions. But now I tell them they need three to five sessions, generally four weeks apart. Particularly with pigmented lesions on the hands, face and chest, you can achieve 80% to 90% clearance with three sessions. Patients love

it. There is not one patient who prefers my older IPL system. The new system is also extremely economical. It is about half the price of some competitors and works much better."

"The problem with IPL technology is that it has not been upgraded since it began about ten years ago," said T. Joseph Raoof, M.D., a clinical assistant professor of medicine at the University of Southern California in Los Angeles. "AFT is a new technology that controls how

deep the fluorescent light penetrates the skin. AFT is also more select when treating hair. Other IPL systems may cause burning of the subcutaneous tissue."

Dr. Raoof also pointed out that after AFT penetrates to the target area and returns, "the area is exposed twice to the light for bet-



T. Joseph Raoof, M.D.

ter results." Furthermore, the wavelength can be adjusted from around 420 to 950 nm. "We have had success treating pigmentation, skin laxity, telangiectasis or broken capillaries, open pores and hair," Dr. Raoof said. "We use a specific wavelength for each indication. After five sessions, scheduled once per month, results have been very satisfactory to excellent. Most patients are ecstatic. Pain and discomfort are very minimal, if any. There is no real downtime."

The Sonata is an 810 nm advanced diode laser that delivers predictable, reliable and reproducible results for hair reduction. High fluence (up to 100 J/cm²) effectively removes even lighter hair, while the long pulse width (up to 400 ms) can effectively and safely treat unwanted hair in all skin types, including tanned skin.

"I like that the Sonata is fast. It has a repetition rate of up to 3 Hz. You can continuously move the wand," said David Hayes, M.D., a facial plastic surgeon in private practice in Missoula, Mont. "Compared to traditional IPL, there are fewer treatment sessions and higher success rates. The Sonata is also less painful. All our pain management is topical."

The Sonata's unique continuous-wave pulse technology uses a combination of overlapping pulses to selectively heat hair without damaging the skin. "This results in less pain and better results," Dr. Hayes noted. "Maintenance is also virtually zero. It is a very stable system. Setting up and operating the machine is very quick. There is only a short learning curve."

Dr. Hayes usually schedules four to six sessions at about three month intervals. "Patients can expect permanent hair reduction, and the Sonata can be used on all skin types. The depth of the wavelength allows it to penetrate without damaging the melanin," he said. "There are also fewer side effects with the Sonata compared to IPL." An integrated cooled sapphire tip increases patient comfort and safety, and the compression handpiece is designed for maximum efficacy. "An integrated Zimmer adapter accommodates an optional Zimmer cooler," Dr. Hayes said.

In addition, Orion's depot service "ships the following day," Dr. Hayes said. "Items are shipped to me prior to the company receiving a shipment first. The company also schedules in-service. I've been very impressed."

"The Sonata maintains the 3 Hz repetition rate right up to 53 J/cm², which is something no other unit can do," stated Amber Brown, M.D., owner of Cosmetic Care Medical Clinic in Brantford, Ontario, Canada. "Even at very high fluences we can still truck along. That makes

"You can deliver heat at multiple levels in the skin, which improves outcomes for hair removal."

a big difference when scheduling patients. Time is money. The more people we can treat in a day, the better we can offset our overhead."

Dr. Brown also appreciates that she can blend the pulse of the Sonata. "This diode laser has both a shorter pulse duration and a longer pulse duration. You can actually combine the two durations within the same pulse. The continuous-wave laser is safer. You can deliver heat at multiple levels in the skin, which improves outcomes for hair removal. A blended pulse is also slightly more comfortable for the patient because the longer pulse duration starts up first and sort-of preheats the skin. The shorter pulse duration is then introduced near the end of the longer pulse duration and increases the heat to its final temperature. In essence, this strategy keeps treatment comfortable, even as you become more aggressive with your settings. The Harmony also has a really nice hair removing treatment head."