

Alma's Pixel CO₂ Omnifit Handpiece Revitalizes Older Systems



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Before Tx

Photos courtesy of Renato Rodriguez, M.D.



One month after third Pixel CO₂ Omnifit Tx

By Bob Kronemyer, Associate Editor

Operating in conjunction with a majority of existing CO₂ lasers, Alma Lasers' (Buffalo Grove, Ill.) new fractional ablative handpiece for skin rejuvenation is much less expensive, ergonomically user-friendly and effective, without the side effects that have typically plagued traditional CO₂ systems.

In July, Alma received FDA approval for its Pixel CO₂ Omnifit handpiece. Similar to other systems that emit a fractional CO₂ output, the handpiece, used with traditional CO₂ skin resurfacing lasers, has been shown to clear photodamaged skin; smooth fine lines, wrinkles and rhytides; shrink the appearance of pores; fill in acne scars; and blend uneven pigmentation.

Alma's Omnifit handpiece has been available in Europe for over a year. “So far, European doctors have not observed the hypopigmentation that exists with CO₂ resurfacing,” said Greg Keller, M.D., a clinical associate professor of surgery (head and neck) at the University of California, Los Angeles. “You can use the Omnifit handpiece on type V skin.”

Dr. Keller is also excited about the impressive resurfacing results he has achieved – usually in one treatment (possibly two), “without the downtime of CO₂ resurfacing.” Patients typically heal in three days.

For many years, Dr. Keller and a number of other physicians have favored systems such as the old Surgilase 150 XJ CO₂ laser for

resurfacing. “But CO₂ laser resurfacing isn't that common anymore. So to be able to achieve modularity with a retrofit is amazing. The handpiece works instantly.”

With a spot size of 8 x 8 mm (9 by 9 array of 81 pixels), the Omnifit handpiece can handle continuous power ranging from 30 to 100 watts. “Right now, we're using 30, 40 or 50 watts with the XJ laser, and a pulse time of 0.1 seconds,” Dr. Keller said. “However, we haven't increased power as much as we can because we are still experimenting with the settings.” Currently, Dr. Keller is using the handpiece to treat patients with skin types I to IV. “I may eventually treat skin type V, but I think it's best to be somewhat cautious in the beginning.”

Due to limited experience, to date Dr. Keller has treated patients mainly for facial rejuvenation and neck/chest rejuvenation. “We'll probably move into arms and hands shortly.” For facial rejuvenation, Dr. Keller has completed only one treatment session with results comparable to or slightly better than four or five sessions with the original Pixel erbium laser. “I expect the duration of effect with the Omnifit handpiece to be similar to CO₂ lasers. CO₂ resurfacing tends to set off cellular pathways that are probably slightly different than those set off by erbium, unless you really stack it and spread the heat.”

For neck and/or chest rejuvenation, Dr. Keller has also completed just one session. “Results appear to be as good as three to five treatments with an erbium laser.”

Patient discomfort with the Omnifit handpiece is similar to other fractional systems. With the application of a

topical before treatment, "there is just a little bit of a sting, more than with the erbium laser," Dr. Keller conveyed. "But it is only one pass, so patients tolerate treatment pretty well."

According to Dr. Keller, director of the Facial Plastic Surgery Fellowship at UCLA, "the Omnifit handpiece also features a somewhat holographic filter rather than a scanner, providing a very smooth distribution of the split beam. It doesn't make any noise." Ergonomically, the handpiece is small, extremely light and easy-to-use. "This may not seem like a huge advantage, but it is. Moving a heavy device around all day is very draining to technical personnel. In addition it seems silly to pay for a new laser with a completely different scanning device when purchasing the Omnifit handpiece is much more affordable and you can continue using a device you are familiar with."

Dr. Keller is the supervising investigator for three studies of the Omnifit handpiece: the first is a subjective result study based on radiance of wrinkles and fine lines, deeper lines and skin texture in a single treatment; the second is a histologic dosimetry study of patients undergoing skin excision with other modalities to measure the depth of penetration and the degree of injury (one treatment session, one or two passes); and the third is wound factors of healing and the tissue cascades that occur over six months with one treatment. Dr. Keller has declined to share any preliminary results from the three studies but is encouraged by outcomes thus far.

"CO₂ with one pass has greater thermal spread, greater damage and a greater inflammatory process which remodels skin," Dr. Keller explained.

"However, the problems of hyperpigmentation and hypopigmentation do not appear to be a concern with fractional CO₂ resurfacing. Hopefully, we will achieve more benefits with fewer problems."

Dr. Keller said it was too early to tell if there are any side effects associated with the Omnifit handpiece. "Because adverse events have not been reported for other fractional resurfacing technologies, I do not expect any with the Omnifit."

When purchasing the Pixel CO₂ laser, Omnifit customers receive a marketing launch kit to assist them in promotion of this new procedure. "I believe the Omnifit handpiece offers our patients the most up-to-date and capable fractionated resurfacing available in the market today," Dr. Keller commented. "Everyone wants the benefits, but a new device can be cost prohibitive. The price of an Omnifit handpiece is a lot less than investing in a new CO₂ laser. Overall, this handpiece is a clear winner."

In addition to offering a cost-effective fractional CO₂ handpiece and solid marketing launch support, Alma Lasers has launched another new consumer site (pixelperfect.com) to help interested patients locate physicians offering Alma fractional treatments.



Before Tx
Photos courtesy of Dr. Raab



After Pixel CO₂ Omnifit Tx

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After Pixel CO₂ Omnifit Tx