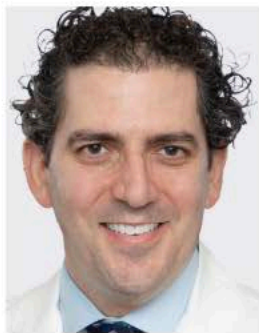


aesthetics



An In-Depth Review of UltraClear Laser-Coring With Paul Friedman, MD

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UltraClear Laser-Coring is a first-of-its-kind advanced technique that targets deep wrinkles and scars to help smooth patients' skin.¹ Paul Friedman, MD, a board-certified dermatologist, Mohs surgeon, and director of the Dermatology & Laser Surgery Center in Houston, Texas, recently spoke to *Dermatology Times* to review UltraClear Laser-Coring and its main benefits, patient downtime, advice for clinicians starting their aesthetic device journey, and how to decide which devices to have in each clinic.

Q Can you please provide a brief overview of UltraClear Laser-Coring and its main benefits?

Paul Friedman, MD: UltraClear is an innovative and versatile MID IR 2910 nm fiber laser that emits energy at peak water absorption. It creates very small ablation channels with minimal thermal dispersion of energy to surrounding tissue. The various modes allow for ease of use, offering highly customized treatments ranging from fractionated low fluence, superficial ablation to high fluence, deep ablation to fully ablative treatments to laser-enabled tissue coring. The degree of tissue coagulation is also customizable on a sliding scale. This wide range of options allows us to safely treat various conditions, including fine lines and wrinkles, photoaging/dyschromia, acne scars, traumatic scars, and rhinophyma/nasal contouring with the fully ablative mode.

Historically, tissue coring technologies have involved the mechanical removal of skin with the goal of achieving the largest possible injury without scar formation by not exceeding 400 to 500 μm in diameter, incorporating proper treatment technique, and avoiding overlap. UltraClear Laser-enabled tissue coring offers the ability to remove tissue at various depths and

tissue densities while also delivering controlled coagulation. At our office, each patient receives a customized treatment that allows us to address various cosmetic concerns in a single treatment by combining multiple UltraClear modes. We have predominantly utilized laser-coring to treat along the jawline, jowls, upper neck, and submentum to achieve tissue tightening.

The UltraClear Laser-Coring mode, or laser-enabled tissue coring, is unique because of how the energy is delivered. The

2910 nm fiber laser operates at 5000 Hz. Pulses are laid down in a flower pattern with six 170 μm drill points in a circular fashion to create uniform and larger ablative microchannels, with an estimated diameter of 360 μm . The device allows us to select depth ranging from 1 to 3 mm, with coverage ranging from 1% to 3%. In our clinic, we typically treat patients using 1 to 2 mm with a coverage of 2% depending on the treatment area. The thermal relaxation time between micropulses allows pressure and steam time to escape the channel, resulting in a more comfortable patient experience. We have found that doing a second pass with the superficial mode expedites the healing process through superficial exfoliation.

We have been able to perform treatments with only topical anesthesia and optional nitrous oxide, obviating the need for more advanced analgesia measures as

compared with traditional ablative fractional resurfacing technologies or mechanical tissue coring devices.

Q How does UltraClear Laser-Coring compare with other available laser treatments in terms of patient discomfort and downtime?

Friedman: UltraClear Laser-Coring delivers quick laser pulses to remove microchannels of skin and may be combined with laser resurfacing to address a wide variety of photoaging concerns. The micropulse technology delivers thermal injury and ablation simultaneously in the same location within the microchannel to promote collagen contraction and tissue tightening. In my experience, patients treated with UltraClear Laser-Coring have experienced less downtime, reduced discomfort, and minimal bleeding as compared with mechanical tissue coring. Patients have reported improvement in

In your experience, what are the main highlights of the UltraClear Laser-Coring?

Friedman: The main highlights of UltraClear Laser-Coring are its ability to:

- Deliver a high ratio of efficacy to downtime for tissue tightening
- Quickly incorporate laser-enabled tissue coring into a customized resurfacing treatment plan.
- Consistent and reproducible cores
- Leverage key advantages of advanced fiber optics—namely, ultrafast speed [5000 Hz], precision, and stability



Before and after images of treatment with Acclaro Medical's UltraClear Laser-Coring. Photos: Joseph Gritzula, DO, FAAD

redundant skin, alongside the beneficial results of laser rejuvenation.

Based on the findings from our histologic analysis following laser-coring—soon to be submitted for publication—we are seeing coagulation along the ablation channel, which explains the tissue tightening observed and controlled hemostasis post procedure.

Q For clinicians wanting to delve more into the aesthetic device industry, what advice do you have for those just starting their journey?

Friedman: Clinicians should become a member of the American Society for Laser Medicine

and Surgery and attend their annual conference. Attending conferences, reading journals, and speaking with colleagues will assist in learning about the aesthetic device market. The purchase of a laser involves large investments, so careful consideration of laser specifications, training, ongoing costs, warranty, and reliability of service are important prerequisites. Physicians looking to purchase an aesthetic device should also identify and evaluate:

- Practice mission and brand
- Patient profile: demographics, lifestyle, attitudes, budget and motivation, etc.
- Common aesthetic needs seen in the practice

- Nearby competitive services, opportunities to differentiate your practice

Q With so many devices in the aesthetic space, what is your advice to other physicians on how to select the best devices to fit their clinic's needs?

Friedman: Before purchasing a new device, physicians should decide what energy-based devices are best suited for their practice and patient population. Think about what procedure you are most often referring your patients to another practice. Before making a decision, I recommend they:

- Discuss new technology and systems with peers
- Research evidence of efficacy and safety (adverse effects) of the device
- Identify gaps in their device toolbox
- Schedule a demonstration of the machine
- Decide between a stand-alone and platform system
- Check the reputation and credibility of the manufacturer
- Find out about educational and marketing support provided by the manufacturer.

Reference

1. Key benefits of UltraClear Laser-Coring. UltraClear. Accessed January 3, 2024. <https://ultraclearlaser.com/solution/laser-dermal-coring/> ■