Ever since its inception, the CO₂ laser has become a cornerstone therapeutic device for numerous dermatologic conditions including notoriously challenging to treat deep acne scars. The Fraxis from Ilooda Co., Ltd. (Suwon, Korea), is a leader in this treatment niche, offering a solution that is not only extremely effective in improving the appearance of deep acne scars, but safe for all phototypes.

“Fractional photothermolysis has changed the entire landscape of skin resurfacing, and fractional CO₂ lasers are now being extensively used in darker phototypes. Yet, the results for deep acne scars including ice pick, box and deep rolling scars, are by and large minimal. However, the Fraxis can achieve very good clinical outcomes for this indication,” said Professor Shahid Javaid Akhtar, M.D., head of the department of dermatology at Punjab Medical College (Faisalabad, Pakistan).

In a recent clinical trial, Dr. Akhtar used the Fraxis to specifically treat individual deep acne scar lesions in a series of Pakistani patients with Fitzpatrick skin type IV. A total of 13 patients with mixed types of severe acne scars underwent three Fraxis treatment sessions, spaced six to eight weeks apart. Following the application of topical anesthesia, the individual lesions were precisely targeted by high-intensity fractional CO₂ laser therapy (125 – 175 mJ/cm², 20% to 30% coverage, three to five passes) to reach a clinical end point of about 90% scar effacement.

Results showed an objective mean improvement of 65% (range 40% to 80%) in nine patients who were available for a final evaluation six months after the last treatment session. The most common, but predictable side effects associated with treatment included serosanguinous exudation, crusting and erythema followed by transient pigmentation in the target sites.

“We found that this high-intensity fractional laser ablation using the Fraxis can lead to a significant improvement of deep acne scars, even ice pick and box scars, but at the cost of transient dyschromia. Although the protocol we used resulted in slightly more downtime, the results were good and patients were quite satisfied with the final outcome,” Dr. Akhtar said.

Fraxis is versatile, operating in both normal and fractional mode, allowing clinicians to use traditional ablation for benign growths including warts, skin tags and angiomas, as well as contemporary fractional resurfacing for common aesthetic concerns, all from one single device. This powerful laser system utilizes an optimum spot size of about 100 microns in fractional mode and a large scan area of up to 20 x 20 mm. The user interface offers an easy to operate, large touchscreen, and the fractional and normal handpieces can be easily exchanged and are very ergonomic.

“I have found the Fraxis very useful and essential for my clinic, and it has given a big boost to my practice. I would strongly recommend this device to all my colleagues.”

Shahid Javaid Akhtar, M.D.
Professor
Head of the Department of Dermatology
Punjab Medical College
Faisalabad, Pakistan
FRAXIS®
High Power CO₂ Fractional Laser

FRAXIS is a fractional CO₂ system that delivers precise and accurate energy to the targeted tissue with predictable ablation and less pain for optimal treatment result.

- True 30W High Power Tube
- 100μm Ideal Beam Size
- Multi shape & Scanning Pattern
- Less Pain and Down Time

Photos courtesy of Michael Naouri, M.D.

Fraxis® CO₂ laser is a reference in terms of comfort and safety for treatment of various benign indications as well as profitability in aesthetic indications. The advantage of the Fraxis® CO₂ laser is its reliability of use, robustness, and power related to its RF emission tube.

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Acne scars and enlarged pores before Tx
Acne scars and enlarged pores after Fraxis Tx
Wart before Tx
Wart after Fraxis Tx