

# Jet Peel

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**T**raditionally peeling techniques, either chemical or mechanical are the most popular methods used for skin rejuvenation. Since the early 1990's various types of lasers have been used to resurface photo aged skin.

The various types of peeling techniques share a common denominator: They all produce a partial thickness injury to the skin. Following the controlled injury to the skin, wound healing processes ensue regenerating the epidermis, replacing and reorienting the fibers in the dermis. The effectiveness of the resurfacing technique is directly related to the depth of the controlled injury to the skin. The physiologic basis of healing following either technique rests upon the ability of the skin to regenerate its epidermal cover by epithelialization through the skin appendages, primarily the pilosebaceous unit. The result is an improved, more youthful appearance and texture of the skin.

The Jet Peel (M) device is based on a new technology derived from the world of aviation, using supersonic flow in nozzles.

A mixture of sterile saline and oxygen passes through an open converging diverging venturi channel, designed to produce supersonic flow accelerating the solution droplets to approximately 200 m/sec and exits through specialized nozzles as a powerful jet directly onto the desired area of skin.



#### Triple Nozzle Handpiece

- Lymphatic Drainage
- Exfoliation
- Infusion



#### Fine Single Nozzle Handpiece

- JetPeel Mesotherapy (needle-less injection)
- Always done after main peeling
- Extraction



#### Single Nozzle Handpiece

- Body treatment
- Infusion



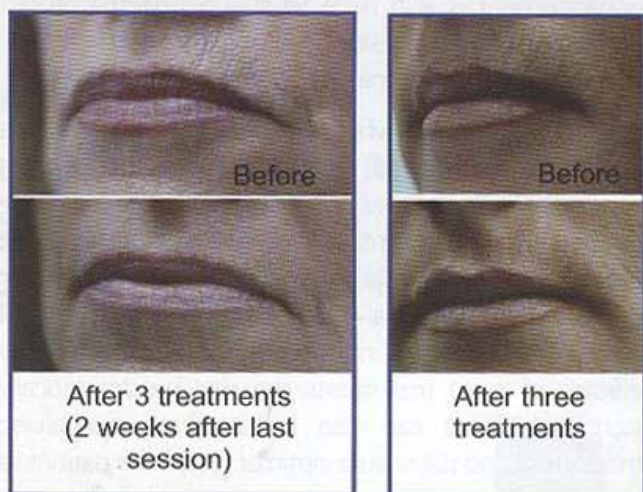
The jet spray impacts on the skin causing shearing forces strong enough to peel the epidermal and dermal layers of skin as necessary, as well as facilitates the penetration of nutrients and medications into the skin to a varying depth of upto 2 to 4mm. The device was cleared by Food and Drug Administration in 2006 for delivery of saline into the skin.

A study was conducted by Dr Gold for the Safety and efficacy evaluation of the JetPeel Device in Transdermal Delivery of Glycolic Acid as a Skin Conditioning Agent. For one treatment, 16 patients were enrolled with follow-up evaluations at 7 days and 4 weeks. The preliminary results were that it is strong on safety and efficacy.

## Results:

- Skin Radiance: 87.5% improvement in 1 week; 93.8% improvement at 4 weeks
- Skin Smoothness: 100% improvement at 1 week
- Pore Appearance: 81.3% improvement at 1 week
- Evenness: 81.3% improvement at 1 week
- Overall Appearance: 87.5% improvement at 1 week; 100% improvement at 4 weeks

This study confirmed that : 1) Jet-phoresis facilitates cutaneous pre-operative anesthesia in a very short 5min application, in contrast to common practiced non-invasive time consuming methods, and 2) Jet-phoresis concept is painless, soothing experience, and easily applicable in an out-patient office setting.



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