Latest Chemical Peel Innovations

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For centuries, man has searched for a miracle potion that would reverse aging wrinkled skin. In the early and middle 1900s, various peeling agents were used. After Baker, Gordon, Litton, and others popularized the classic phenol peel in the 1960s, the deep chemical peels became a key procedure in the treatment of the aging face and represented an important component of a successful facial aesthetic practice. Since that time, there has been continued interest in resurfacing the facial skin and an evolution of peeling agents, including those for superficial peeling.

Lasers became popular tools to resurface the skin beginning in the 1990s. While some lasers treat more superficially, others, such as the carbon dioxide lasers, have the potential to treat deeply. The side effects of deep carbon dioxide lasers, such as long-term hypopigmentation, fostered the development of fractionated beams that were designed to lessen tissue damage and reduce such side effects. However, the separation of beams to spare segments of untreated tissue and the reduction of intensity of the fractionated light beam reduce aesthetic results. The cost of laser skin resurfacing can be quite significant. This includes not only the cost of the laser unit but also associated equipment such as smoke evacuators, cooling machines, appropriate safety items such as eyewear and masks, and regular maintenance for the equipment.

Properly structured skin care/peeling protocols using the sequential application of the authors' superficial chemical peeling technique may approximate many of the fractionated laser treatments. Because of the inexpensive nature of

peels, they can be offered as an effective alternative to fractionated laser treatments. This article describes a new variation on a classic technique that can provide greater improvements than those typically obtained by superficial peels. The authors' technique of enhanced superficial chemical peels has been found to produce excellent results with minimal down time and costs.

BACKGROUND OF CHEMICAL PEELS FOR FACIAL REJUVENATION

As people age, the skin regeneration process slows; the epidermis thins, and the outer stratum corneum layer becomes less organized. The rete pegs and dermal papillae become less pronounced, resulting in a flattening of the dermal–epidermal junction. The dermis also thins, and the collagen and elastin fibers diminish in volume and organization. The additive effects of this aging process and associated solar damage lead to characteristic findings, which include irregular, wrinkled skin with keratosis and pigment changes. These changes are well-addressed with the enhanced superficial chemical peels technique.

Chemical peeling involves the application of a chemical exfoliant that initiates a controlled wound to the epidermis and/or dermis. In general, results are dependent upon the depth of penetration. Penetration can be altered by the type of agent, the concentration of the agent, the time of contact with the skin, the potential reapplication of the agent, and the resistance of the skin. Peeling may be enhanced by pretreating the skin with an effective daily exfoliation program designed to

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